# RESPONSIVENESS SUMMARY TO COMMENTS RECEIVED DURING PUBLIC NOTICE

#### **FOR**

## DRAFT AIR QUALITY CONTROL PERMIT NO. 1000108 ARIZONA PUBLIC SERVICE COMPANY - CHOLLA POWER PLANT

BEGIN PUBLIC NOTICE: MAY 12, 1999 END PUBLIC NOTICE: JUNE 12, 1999

The following is in response to a comment on the draft Air Quality Control Permit No. 1000108, submitted by Mr. Michael O'Dell, a citizen of Holbrook, Arizona, through his letter dated May 17, 1999. Mr. O'Dell's comment is enclosed in Attachment "A" of the responsiveness summary.

**Response to Mr. O'Dell's Comment** was indicated in your comment that "On the average of once or twice a week the emission from the Cholla Plant looks bad, usually in the morning and evening... This brownish yellow smoke sometimes stretches for miles, all the way to Woodruff, or to the Petrified Forest area, 30 or 40 miles away." The comment had been referred to the ADEQ North Regional Office (NRO) located in Flagstaff for an inspection of the described smoke emission. This office can be reached at 520-779-0313. In general, the power plant relies on combustion of fossil fuels such as coal or natural gas to generate electricity. Coal combustion results in emissions of a number of air pollutants, the most significant of which are Particulate Matter (PM), Sulfur Dioxide (SO<sub>2</sub>), and Nitrogen Oxides (NO<sub>x</sub>). The following discussions address (i) the perceived variability in visibility and emissions, and (ii) a brief description of the air quality permit.

#### Emissions and Visibility

The most important factors in determining the "darkness" of the exhaust plume are the amount of PM in the plume, and the configuration of the sun, the plume, and the observer. The term "opacity" is used in regulatory circles to quantify the "darkness" of a plume. The higher the opacity, the darker the plume. Generally speaking, the plume appears more opaque to the observer when the sun is behind the plume, than when the observer is in between the sun and the plume. Therefore, a plume with similar levels of PM emissions could appear to have different opacities depending on the positions of the sun and the observer relative to the exhaust plume.

In addition to the quantity of pollutants in the exhaust plume, ambient atmospheric conditions could affect the visibility in the region. Two examples of such ambient atmospheric conditions are as follows:

(i) Under typical daytime conditions, atmospheric convection currents cause vertical mixing of air. Pollutants emitted close to the ground are carried upwards by the vertical movement of air, and the exhaust plume thus gets "diluted". During the early morning hours however, the air close to the ground is still cool and the sun's rays have not yet heated up the atmosphere adequately to generate vertical convection currents. The air close to the ground does not mix with the layers of air in the upper atmosphere. Pollutants emitted close to the ground, therefore, remain there. In other words, the plume is "trapped" in the lower atmosphere, and is not diluted by vertical mixing. The atmospheric haze can thus appear worse in the morning times even though the amount of pollutants emitted is the same as during typical daytime conditions.

(ii) SO<sub>2</sub> and NO<sub>x</sub> are compounds that can react with other chemicals present in the atmosphere under specific ambient conditions. These reactions form visibility degrading compounds, and can result in a brownish haze. These reactions are highly dependent on ambient conditions such as sunlight, humidity and atmospheric circulation. The same amount of emissions, therefore, could cause different visibility effects depending on ambient conditions.

Other reasons for the observed variability in emissions could be:

- (i) The power plant has air pollution control devices to reduce the amount of emissions. However, during startup and shutdown sequences for the boilers, it is technically infeasible to bring and maintain the air pollution control equipment on-line until certain operating parameters are attained. During these periods, emissions may be higher than normal.
- (ii) During periods of air pollution control equipment malfunction, emissions may be higher than normal.

#### Air Permit Number 1000108

Permit Number 1000108 was drafted based on Federal and State air quality rules and regulations. It sets forth emission standards for PM, NOx,  $SO_2$ , and opacity. To ensure compliance with all the emission standards, the permit further requires operation of air pollutant control equipment, monitoring, recordkeeping and reporting, and compliance testing. The plume opacity, for example, is required by the permit to be reduced through PM emission controls, and to be monitored day and night on a continuous basis, using an instrument called Continuous Opacity Monitoring System. This instrument has an artificial light source which enables it to measure opacity even during the nighttime. Any exceedances of the standard have to be reported to ADEQ within 24 hours of occurrence. The rate of  $SO_2$  and  $NO_x$  emissions are also monitored using Continuous Emissions Monitors. Any recorded exceedance of permitted limits have to be reported to ADEQ within 24 hours of their occurrence. If you would like to report an apparent emission excursion, please contact Ms. Weiwen Daly at (602)207-2281 or 1-800-234-5677 ext. 2281.

To determine compliance with the plume opacity standard, a visual observation is also required to be conducted annually for the stack smoke, using USEPA Reference Method 9. This method relies on observation by the human eye. As a resident of the local community, you are encouraged to join the monitoring effort by becoming a certified Method 9 observer, so that the next time you observe a darker than normal exhaust plume, you will be able to take valid opacity readings and compare them to the opacity standard. To learn more of Method 9 certification, please contact Mr. Steve Olson, Air Compliance at (602)207-2339 or 1-800-234-5677 ext. 2339.

In regard to the concerns on Unit 1, the unit is not subject to the federal rules called the New Source Performance Standards (NSPS) because it was built before August 17, 1971. Rather, the unit is categorized as an existing source to which only the less stringent state rule, A.A.C. R18-2-703, applies. As a state agency, ADEQ does not have authority to request that the Unit 1 be subject to NSPS only because the state rule is less stringent.

As stated in our mission statement, ADEQ is committed to preserving, protecting and enhancing the environment and the public health. To maintain and improve the quality of Arizona's air, we strive to control the present and

future sources of air pollution. This permit will be used as an effective channel towards better control of the air quality.

The following discussions are responses to comments on the draft Air Quality Control Permit No. 1000108, submitted by Arizona Public Service Company (APS), Cholla Power Plant (Cholla) through their letter dated June 9, 1999. APS-Cholla's comments are enclosed in Attachment "B" of the responsiveness summary.

**Response to APS-Cholla Comment 1:** The comment does not provide ADEQ with specific terms or conditions within the draft permit that APS-Cholla believes are different in form. A few terms or conditions may have been paraphrased from the applicable requirements to protect the grammatical integrity of the permit. All terms or conditions in the permit, however, have been carefully drafted and thoroughly reviewed by ADEQ to ensure that the essence of the applicable requirements has been maintained. ADEQ believes that the paraphrase should not be considered as "difference in form".

**Response to APS-Cholla Comment 2:** The suggested changes have been made.

Response to APS-Cholla Comment 3: The suggested change has not been made. CAA 504(a) requires each Title V permit to "assure compliance with applicable requirements of this Act, including the requirements of the applicable implementation plan." 40 CFR 70.2 or A.A.C. R18-2-101.39 gives a complete definition of the applicable requirements that must be included in a Title V permit. Among the applicable requirements is "any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I, including Parts C or D, of the Act". The installation permits Nos. 1037, 1244 and 1247 and the PSD permit No. M170843S1-98 were all issued pursuant to a SIP approved program or federally delegated PSD program under Title I, Parts C or D of the Act. The terms and conditions contained in these permits have therefore been included in the Title V permit as a part of the applicable requirements. In addition, the installation permit requirements are applicable requirements that are included in the permit shield, i.e., compliance with the terms and conditions of the Title V permit will be deemed to be compliance with the underlying installation permit condition requirements. The language in A.A.C. R18-2-303(A) was designed to address permit coverage during the transition into Title V permits. It should not be interpreted to mean that the pre-1993 installation permits cease to exist as separate documents.

**Response to APS-Cholla, Summary Table Comments 4-32:** The summary table was intended for reference use only, and was not designed to include the full fledged enforceable terms and conditions of this permit. The comments in regard to the summary table suggest many changes that would alter the intended purpose of the table. To avoid inconsistency between the summary table and the permit, the summary table has been removed from the permit.

**Response to APS-Cholla, Summary Table Comment 21:** As stated in ADEQ's response dated May 24, 1999 to APS-Cholla's comments on the pre-public notice version of the draft permit, A.A.C. R18-2-730(A) is applicable to unclassified sources at APS-Cholla. The unclassified sources include units such as the flyash silo, the lime handling and slaking facility, and the cooling towers. The language in the State Implementation Plan (SIP) is different from the current rule, as pointed out in the latest comment. Permit conditions based on the current rule

are, therefore, not federally enforceable. However, upon issuance of the Title V permit, all of the conditions in the permit will be federally enforceable, except for those explicitly identified as being State Enforceable Only. Knowing that A.A.C. R18-2-730 has been submitted to EPA for approval, the conditions based on A.A.C. R18-2-730(A) have not been marked as State Enforceable Only in this permit. At such time that the current rule is approved into the SIP it will be a logistical burden for APS-Cholla and ADEQ to reopen the Title V permit for removal of the State Enforceable Only designation. As discussed in previous stakeholder meetings, performance tests are not typically required for units subject to A.A.C. R18-2-730. In the case of APS-Cholla, periodic monitoring with the particulate matter standard in A.A.C. R18-2-730(A) involves proper operation and maintenance of online control devices, and record-keeping measures for units that do not use control devices.

Response to APS-Cholla, Attachment "A" Comment 33: The suggested change has been made.

**Response to APS-Cholla, Attachment "A" Comment 34:** The suggested change has been made to read "For a situation lasting more than 24 hours which constitutes a deviation..."

**Response to APS-Cholla, Attachment "A" Comment 35:** The suggested change has been made to read "...within two working days of the time when Permittee first learned of the occurrence of the deviations".

**Response to APS-Cholla, Attachment "A" Comment 36:** The suggested changes have not been made. The intent of this section is to cover situations of extended noncompliance that last more than 72 hours but less than six months. The language chosen by the Department describes what is required of the permittee and no changes are necessary. The source is encouraged to contact the Department to discuss mitigatory measures for the compliance schedule.

Response to APS-Cholla, Attachment "A" Comment 37: (1) The first change suggested has not been made. The inclusion of 317 rule in the permit is not required pursuant to A.A.C. R18-2-306. In addition, the applicable implementation plan for Arizona does not provide for emission trades. In the future, if such allowances are made in this state, APS would be allowed to make changes pursuant to A.A.C. R18-2-317.C without a revision to the permit. (2) The second change suggested has been made; (3) The third change suggested has not been made. This section has been directly quoted from the rule. The intent of the rule has not been changed by putting it into the permit. Based on the comment, APS-Cholla is aware of the changes that would qualify the provisions under A.A.C. R18-2-317. This rule is designed to allow for operational flexibility, not overly burdensome reporting of simple maintenance. ADEQ is open to meet with APS-Cholla to discuss what is required to be filled under the 317 rule outside of the permit.

**Response to APS-Cholla, Attachment "A" Comment 38:** The suggested change has not been made. The language in Section XXI.C was quoted directly from A.A.C. R18-2-306.A.6.b. ADEQ understands that the allowances here refer to that of sulfur dioxide. However, the same conditions in Attachment "A" apply to all other utility companies and should be kept general and consistent.

Response to APS-Cholla, Attachment "B" Comments 39-42, 45, 49, 51-53, 55, 56, 58, 60, 63, 64, 68, 70, 72, 74-77, 80, 82-84, 92-95, 97, 99, 104, 108, 114-116, 118, 119, 122, 123, 125, 127, 128, 131, 134, 135, 138, and 140: The changes suggested by the referenced comments have been made accordingly. See the

relevant comment for a particular change.

**Response to APS-Cholla, Attachment "B" Comment 43:** The suggested change has not been made. The requirement of a source to have a qualified Method 9 observer on staff is deemed necessary to assure compliance with the opacity standard in a timely manner. The same condition has been required of all other utility companies statewide to keep consistency. The reference to the condition has been replaced with A.A.C. R18-2-306.A.3.b.

**Response to APS-Cholla, Attachment "B" Comment 44:** The suggested change has been made to read "Within fourteen (14) calendar days after the compliance certifications required by Section VII of Attachment 'A' have been submitted, Permittee shall submit summary reports of all monitoring activities required in this Attachment performed in the six months prior to the date of the report."

Response to APS-Cholla, Attachment "B" Comments 46,65,85, and 103: The changes suggested by the referenced comments have not been made. The reference to A.A.C. R18-2-306.A.2 for the "Fuel Limitation" conditions has been replaced with the relevant installation permit numbers as the origins of the conditions, namely, the Installation Permit Nos. 1002 for Unit 1, 1037 for Units 2 and 3, and 1085 for Unit 4. While Nos. 1037 and 1085 are the original installation permits, No. 1002 is an installation permit for the Unit 1 gas scrubber facility. Unit 1 was built in 1961 prior to a PSD program, and it is unclear whether an original air quality installation permit was issued for the unit. The type of the fuel combusted is one of the factors that determine the capacity of a source to emit pollutants and the effect of burning different fuels on ambient air quality varies. The "Fuel Limitation" requirement is termed to prevent potential use of any unpermitted fuel which would adversely impact the quality of the ambient air; it assures compliance with the relevant ambient air quality standards. Therefore, the inclusion of the condition is not redundant.

Response to APS-Cholla, Attachment "B" Comments 47, 66, 67, 86, 87, 105-107, 126, and 129: The comments were made in regard to A.A.C. R18-2-306.A.2 being used as the rule reference to relevant permit conditions. The reference to A.A.C. R18-2-306.A.2 has been replaced, as suggested in the comments, with the reference to the origin of a particular permit condition. See the relevant comment for a particular change. ADEQ, however, does not concur with APS-Cholla's interpretation in regard to the authority of A.A.C. R18-2-306.A.2. In contrary to the interpretation, ADEQ believes that A.A.C. R18-2-306.A and 306.A.2, as they read, clearly provide a permitting agency with authority to include in the permit "enforceable emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements...".

**Response to APS-Cholla, Attachment "B" Comment 48:** A change has been made to replace the reference to the condition, A.A.C. R18-2-306.A.2, with the Installation Permit No. 1002. This installation permit is for the Unit 1 gas scrubber facility. Unit 1 was built in 1961 prior to the PSD program, and it is unclear if an original air quality installation permit was issued for the unit.

**Response to APS-Cholla, Attachment "B" Comment 50:** The suggested change has been made. The "boiler operating day" definition has been added to Section I.B., Definitions.

Response to APS-Cholla, Attachment "B" Comment 54: The suggested changes for Section

II.C.1.d(2)(b)iii and iv have not been made. The two conditions differ from that of 40 CFR 60, Appendix B, Performance Specification 1 in which the optical surfaces cleaning is not explicitly specified. The change for Section II.C.1.d(2)(c) has been made as suggested.

**Response to APS-Cholla, Attachment "B" Comment 57:** The reference to A.A.C. R18-2-306.A.5.a has been replaced with Installation Permit No. 1247, the origin of the efficiency requirement.

Response to APS-Cholla, Attachment "B" Comments 59, 78, 96 and 117: The suggested changes by the referenced comments have not been made. In the early phase of the permit drafting through several stakeholder meetings, it was decided to use Acid Rain Program monitoring, recordkeeping and reporting requirements to streamline that of the Part 70. Sections II.C.1.e(5), III.C.1.g(2), V.C.1.g(2) and VI.C.1.e(2) are the results of the streamlining effort, and used for the purpose of Title V recordkeeping and reporting. The reference, A.A.C. R18-2-306.A.4 and 5, has been added for Section II.C.1.e(5), and the reference 40 CFR 60.7 has been added for Sections III.C.1.g(2), V.C.1.g(2) and VI.C.1.e(2).

Response to APS-Cholla, Attachment "B" Comments 61, 81, 100 and 120: Sections II.C.2.a, III.C.2.a, V.C.2.a and VI.C.2.a are aimed to ensure correct operation of the particulate matter emission control equipment, using the stack opacity as a surrogate performance indicator. The control equipment shall operate correctly at all times including the periods when the units combust fuel for less than a three-hour period. The particulate matter emission standards given in A.A.C. R18-2-703.C.1 and 40 CFR 60.42(a)(1) are applicable to products of combustion occurrences in the boilers. Exhaust gases do not exit the system instantaneously after the flame in the boilers is extinguished. The particulate matter standards will apply to the relevant stacks until all the gases clear the system. The wording of the comments could be interpreted to mean that the standards cease to apply at the instant that the fuel supply is cut off. The wording is misleading and therefore, the suggested changes have not been made. The word "consecutive" has been inserted as suggested.

**Response to APS-Cholla, Attachment "B" Comment 62:** The suggested change has not been made. Attachment "A", Section XII.B only outlines the general requirement on recordkeeping, whereas Section II.C.3 addresses the specifics for coal analysis. This condition, therefore, is not redundant, but rather complementary to the general requirement. Since the coal analysis data play a crucial role in determining SO<sub>2</sub> removal efficiency, the recordkeeping requirement is considered necessary. The reference to A.A.C. R18-2-306.A.3.b has been replaced with A.A.C. R18-2-306.A.4.a.

**Response to APS-Cholla, Attachment "B" Comment 69:** A new subsection number, III.C.1.c(4) has been created to accommodate the suggested language "Permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days."

**Response to APS-Cholla, Attachment "B" Comment 71:** The correct reference, 40 CFR 60.13(h), has been added.

**Response to APS-Cholla, Attachment "B" Comment 73:** The suggested change has been made to read "If the minimum data requirement specified in paragraph III.C.1.c(4) above cannot be met with the continuous monitoring system in use, Permittee shall supplement...".

**Response to APS-Cholla, Attachment "B" Comment 79:** The suggested change has been made to read "Unless otherwise specified, SO<sub>2</sub> excess emissions are defined as any 30 successive boiler operating days for which, except for data obtained during startup, shutdown, or emergency conditions, the arithmetic average of all hourly emission rates for sulfur dioxide exceeds the applicable standard of 0.8 pounds per million Btu heat input, or the percentage sulfur dioxide reduction falls below the applicable standard of 90 percent, as required in paragraph III.A.3 of this attachment. The percentage sulfur dioxide reduction is determined based on the average inlet and average outlet SO<sub>2</sub> emission rates for the 30 successive boiler operating days."

**Response to APS-Cholla, Attachment "B" Comments 88 and 109:** To address the change suggested by the comments for technical correctness and permit clarity, the language in Sections V.C.1.b and VI.C.1.b has been changed to read "Permittee shall employ the 40 CFR 75 NOx CEMS installed on Steam Boiler Unit \_ for the purpose of periodic monitoring of the nitrogen oxides emissions under this permit." In addition, the periodic monitoring rule, A.A.C. R18-2-306.A.3.b, is referenced following the paragraphs V.C.1.b and VI.C.1.b, which clearly indicates that the NOx CEMS is required to be deployed by the periodic monitoring rule.

**Response to APS-Cholla, Attachment "B" Comment 89:** The suggested removal of NOx CEMS requirements has not been made. A.A.C. R18-2-306.A.3.b requires "periodic monitoring sufficient to yield reliable data...". The requirements under section V.C.1.d are deemed to be sufficient to assure reliability of the yielded NOx CEMS data. The reference to A.A.C. R18-2-306.A.3.b has been added for NOx CEMS. The reference to 40 CFR 60.13 has also been added for SO<sub>2</sub> and O<sub>2</sub> monitors, as suggested.

**Response to APS-Cholla, Attachment "B" Comment 90:** The reference  $40 \,\text{CFR} \,60.13$ (h) has been added for  $SO_2$  and  $O_2$ , and the reference A.A.C. R18-2-306.A.3.b has been added for NOx.

**Response to APS-Cholla, Attachment "B" Comment 91:** The reference A.A.C. R18-2-306.A.3.a has been added for  $SO_2$  and  $O_2$  and A.A.C. R18-2-306.A.3.b for Nox.

**Response to APS-Cholla, Attachment "B" Comment 98:** The suggested change has been made. As a result, annual performance testing becomes necessary to demonstrate compliance with the SO<sub>2</sub> emissions standard. This requirement has been added.

**Response to APS-Cholla, Attachment "B" Comment 101:** The suggested change has been made. Additionally, the annual performance testing requirement for SO<sub>2</sub> emissions has been added for APS-Cholla to demonstrate compliance with SO<sub>2</sub> emissions standard.

**Response to APS-Cholla, Attachment "B" Comment 102:** The suggested change has been made. The reference to SO<sub>2</sub> testing is 40 CFR 60.46(b)(4), not A.A.C. R18-2-901.

**Response to APS-Cholla, Attachment "B" Comment 110:** This subsection has been re-numbered to VI.C.1.d. A subtitle " $SO_2$  and  $O_2$ " has been added unto the Section VI.C.1.c. that accommodates monitoring requirement for  $SO_2$  and  $O_2$ .

**Response to APS-Cholla, Attachment "B" Comment 111:** The reference A.A.C. R18-2-306.A.3.b has been added for NOx CEMS. The reference 40 CFR 60.13 has also been added for SO<sub>2</sub> and O<sub>2</sub> monitors, as suggested.

**Response to APS-Cholla, Attachment "B" Comment 112:** The reference A.A.C. R18-2-306.A.3.b has been added for NOx CEMS. The reference 40 CFR 60.13(h) has also been added for SO<sub>2</sub> and O<sub>2</sub> monitors.

**Response to APS-Cholla, Attachment "B" Comment 113:** The reference A.A.C. R18-2-306.A.3.a has been added for SO<sub>2</sub> and O<sub>2</sub> monitors, and A.A.C. R18-2-306.A.3.b for NOx.

**Response to APS-Cholla, Attachment "B" Comment 121:** The suggested change has been made to read "...for each burn that has been tested under..."

Response to APS-Cholla, Attachment "B" Comment 124: The reference to the authority for this permit condition has been changed to Installation Permit No. 1160, Installation of Johnson-March Dust Supression System. The requirement on water spraying/chemical dust suppression control is considered an operational requirement that assures compliance with the opacity and particulate matter standards set forth for the coal preparation plant. The wording "at all times" has been removed, as suggested. In regard to the concern on CAM, the CAM rule only applies to a major source. However, the coal preparation plant, without add-on controls, is not a major source under the Part 70 definition.

Response to APS-Cholla, Attachment "B" Comment 130: The phrase "at all times" has been replaced by "during operation of the lime handling and slaking facility". The comment was also made in regard to A.A.C. R18-2-306.A.2 being used as the rule reference to relevant permit conditions. As suggested, the reference to Installation Permit No. 1247 has been made to replace A.A.C. R18-2-306.A.2 as an origin of the permit condition. However, ADEQ does not concur with APS-Cholla's interpretation in regard to the authority of A.A.C. R18-2-306.A.2. In contrary to the interpretation, ADEQ believes that A.A.C. R18-2-306.A and 306.A.2, as they read, clearly provide a permitting agency with authority to include in the permit "enforceable emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements...".

**Response to APS-Cholla, Attachment "B" Comments 132 and 133:** Conditions X.C.2.a and b are related to recordkeeping and the correct reference is A.A.C. R18-2-306.A.4. This reference has been added. The reference to A.A.C. R18-2-306.A.2 has been removed.

**Response to APS-Cholla, Attachment "B" Comments 136 and 137:** The suggested changes have been made, except for the phrase "to prevent excessive amounts of particulate matter from becoming airborne". This phrase is first stated in the paragraph under XI.A.1.b. To avoid redundancy, this phrase has not been added.

**Response to APS-Cholla, Attachment "B" Comment 139:** This condition has been changed to read "Any other method as proposed by Permittee and approved by the Director", and the reference to A.A.C. R18-2-306.A.3.b has been added.

Response to APS-Cholla, Attachment "B" Comment 141: The suggested change has not been made. Condition XI.B.1 addresses recordkeeping that is designed to serve for the purpose of periodic monitoring as required by A.A.C. R18-2-306.A.3.b. Under Section XI.A.1.b, the source is to employ reasonable dust control measures whenever excessive amounts of particulate matter become airborne, regardless of how trivial the activities are. The requirement of the recordkeeping is for the source to demonstrate that the dust control measures have been adequately taken for all activities, including those trivial ones, that would cause excessive amounts of particulate matter to become airborne. The suggested exemption of the short-period activities is deemed insufficient for the periodic monitoring to yield reliable data.

Response to APS-Cholla, Attachment "B" Comment 142: This condition has been changed to read "any other method as proposed by Permittee and approved by the Director". Previously, EPA has commented on the condition in other draft Title V permits by requiring that all other methods of the "good modern practices" be specifically identified either in the permit or through a permit revision. ADEQ, then, adopted the above referenced language to maintain a certain level of flexibility mutually shared by the source and the agency. The same condition has been required of all utility companies statewide.

**Response to APS-Cholla, Attachment "C" Comments 143 and 144:** The changes suggested by the referenced comments have been made accordingly.

Response to APS-Cholla, Attachment "D" Comments 145-156: The changes suggested by the referenced comments have been made accordingly. See the relevant comment for a particular change.

**Response to APS-Cholla, Attachment "D" Comment 157:** The suggested change has not been made. ADEQ understands that, under the Part 75 program, a source is not required to notify the agency prior to the monitor replacement. The CEMS list, however, provides ADEQ personnel with the necessary information to identify each piece of emission monitors on site, and therefore, plays a unique role in the departmental field inspection. As of the concern in regard to the permit revision, in case of like-to-like monitor replacement, the change may be allowed under A.A.C. R18-2-317.

Response to APS-Cholla, Technical Review Comments 158-164, 174, 175 and 178-180: The changes suggested by the referenced comments have been made accordingly. See the relevant comment for a particular change.

**Response to APS-Cholla, Technical Review Comment 165:** The suggested change has not been made. This table lists information on general air quality controls, and is not designed for the purpose of CAM.

**Response to APS-Cholla, Technical Review Comments 166-169:** The changes suggested by the comments have not been made. Table 5 was designed for the purpose of Part 70 permit. The NOx emission allowables listed in the table were calculated based on NOx emission standards of either NSPS or SIP, but not Acid Rain program. For Unit 1, which was built before May 30, 1972, there is neither a NSPS standard nor a SIP standard for the NOx emissions that is applied to the unit and therefore, the allowable is not available. For Units 2-4, they are subject to the NOx standard contained in 40 CFR 60.44 of 0.70 lbs/mmBtu, with which, the NOx allowables were obtained. The PTEs were calculated using AP-42 emission factors, and the results should be different than

the allowables.

**Response to APS-Cholla, Technical Review Comment 170:** Based on the reasons stated in ADEQ's letter to Mr. David R. Simonton from Michael J. Traubert, dated December 11, 1997, ADEQ believes that the referenced NOV was valid and should not be withdrawn.

**Response to APS-Cholla, Technical Review Comment 171:** The suggested change has been made, except that the sentence "Unit 2/3 SO<sub>2</sub> Emission monitoring requirements..." has not been added. A similar sentence for the monitoring requirement has been placed in the Unit 3 cell because the 40 CFR Subpart Da requirements apply to each portion of the Unit 2/3 SO<sub>2</sub> monitoring, as stated in PSD Permit No. M170843S1-98.

**Response to APS-Cholla, Technical Review Comment 172:** The suggested change has been made. As the comment states, Unit 3 SO<sub>2</sub> monitoring is subject to Subpart D requirements. In the meantime, the SO<sub>2</sub> monitoring of Unit 3 portion of Unit 2/3 is subject to 40 CFR 60.47a requirements as established in PSD Permit No. M170843S1-98. Since both virtually refer to the same SO<sub>2</sub> CEMS, the Unit 3 SO<sub>2</sub> monitoring is subject to 40 CFR 60.47a requirements, as a result of streamlining.

**Response to APS-Cholla, Technical Review Comment 173:** The words "mechanical cyclones" has been added, as suggested. The words "Dust Suppressants Wetting system", however, has not been removed. The "Control Measure" column only describes general information on air quality controls, and is not designed for the purpose of CAM.

**Response to APS-Cholla, Technical Review Comment 176:** The suggested change has not been made. The requirements of Unit 2/3 (common stack) for sulfur dioxide has already been addressed in the subsections for Units 2 and 3.

Response to APS-Cholla, Technical Review Comment 177: The suggested change has been made to read in part "Sharing a common stack with Unit 2, Unit 3 is subject to the sulfur dioxide standard of 1.2 lb/MMBtu heat input in accordance with A.A.C. R18-2-903.3.c.i while burning coal. Permittee is required to maintain and operate a SO<sub>2</sub> continuous monitoring system consistent with 40 CFR 60.47a ("Emission monitoring") to continuously monitor the sulfur dioxide emissions from Unit 3, which is established in PSD Permit No. M170843S1-98."

**Response to APS-Cholla, Technical Review Comment 181:** The suggested change has not been made. The current writing has well reflected the conditions in the draft permit.

**Response to APS-Cholla, Technical Review Comment 182:** Items 53 and 54 were verified as not insignificant under the "Verification" column.

**Response to APS-Cholla, Technical Review Comment 183:** The phrase "Under permit term" has been replaced with "Permitted activity", which indicates that the referenced equipment is subject to conditions in the permit.

#### ATTACHMENT "A": MR. O'DELL'S COMMENT

Mr. Michael O'Dell, a citizen of Holbrook, Arizona, submitted to ADEQ a comment on the draft Air Quality Control Permit No. 1000108 through a hand-writing letter dated May 17, 1999. The following is the comment text reproduced from its manuscript:

This letter is in response to the Permit #1000108 that is being considered for the Cholla Power Plant near Joseph City. I've lived in Holbrook my whole life, 43 years and I can tell when the emissions from this plant is bad. On the average of once or twice a week the emission from the Cholla Plant look bad, usually in the morning and evening. Making you wonder what's happening at night when no one can see it!? This brownish yellow smoke sometimes stretches for miles, all the way to Woodruff, or to the Petrified Forest area, 30 or 40 miles away!! The Holbrook area is dependant on tourism! These emissions can't be good for the painted desert Petrified Forest National Park and they can't be good for people's health in this area!? A.D.E.Q cannot watch this plant enough and 98% of the local residents wouldn't tell you anything, even if something was obviously wrong!! If this plant has the capability to run clear for days, what is the problem the days it looks bad? If the older #1 unit is exempt from the newer regulations then I'd say the permit does need to be revised and updated!! A.P.S is a multi-million dollar company. If there is a way for them to clean up their emissions they should do it!

#### ATTACHMENT "B": APS-CHOLLA COMMENTS

Arizona Public Service Company (APS), Cholla Power Plant (Cholla) submitted to ADEQ the following comments on the draft Air Quality Control Permit No. 1000108 through their letter dated June 9, 1999:

**APS Comment 1:** A.A.C. R18-2-306.A.2.a requires that the permit "...identify any difference in form as compared to the applicable requirement upon which the term or condition is based." Contrary to this requirement, several permit terms or conditions exist in this permit that were written in a different form than that contained in the referenced applicable requirement. These terms and conditions are not identified as being different in form. Therefore, ADEQ should either amend the draft permit language so that each term and condition is the same as the applicable requirement or identify each permit term or condition in this permit that is different in form from the applicable requirement.

**APS Comment 2:** Several minor changes to page 1, the cover page, are requested to correct minor technical inaccuracies.

- A. Second paragraph, line 5. Insert the word "approximately" immediately prior to 0.3-0.4%.
- B. Second paragraph, line 5. Insert the word "an" immediately following the word with.
- C. Second paragraph, line 6. Insert the words "for particulate matter removal" immediately following the word precipitator.
- D. Third paragraph, line 1. The draft permit language says that the plant is classified as a Class I major source pursuant to A.A.C. R18-2-302.B. This provision establishes two different classes of permits, either a Class I or a Class II. It does not contain language to classify a source. However, A.A.C. R18-2-101.61 does classify Cholla Power Plant as a Class I major source. Therefore, APS requests that the first sentence in this paragraph be replaced with the following: "The Cholla Power Plant is classified as a Class I major source pursuant to A.A.C. R18-2-101.61."
- E. Fourth paragraph, line 2. Delete the word "the" that precedes the word Cholla.

**APS Comment 3:** Page 1, fifth paragraph. The draft permit and Technical Review and Evaluation of Application document contain several references to installation permits, and other permits that were issued in the past. For example, the last paragraph of the summary page of the permit provides:

This Class I permit supersedes all previous operating permits issued to APS, Cholla. The terms and conditions of these permits are void as of the date of issuance of this permit. This permit incorporates the applicable requirements contained in the underlying construction/ installation permits and does not affect those applicable requirements.

Table 1, Summary of Permit Requirements, refers to Installation Permit No. 1247 and PSD Permit No. M170843S1-98. Attachment "C": Applicable Requirements refers to Installation Permits No.1247 and No. 1037 and to Prevention of Significant Deterioration Permit No. M170843S1-98. The Technical Review and Evaluation of Application document, Section V, Applicable Regulations Verification refers to Permit No. 1247, Installation Permit No. 1037, and PSD Permit No. M170843S1-98.

The possible implication of these references is that some how those installation and other permits continue in force. With regard to installation permits issued prior to September 1, 1993, the law and regulations are clear. Chapter 299, §65.B of the 1992 Arizona Session Laws provides that installation permits issued before September 1, 1993 continue in effect until an operating permit for the source is granted. The agency adopted this position in AAC R18-2-303.A. Therefore Installation Permits No. 1247 and No. 1037 are no longer in effect.

The Arizona Laws also expressly address permits issued after September 1, 1993. The 1992 Amendments to Arizona's Air Quality Control Act make clear that (1) ADEQ's authority to issue installation permits expired on September 1, 1993 (see Chapter 299, §12 and §13 of the 1992 Arizona Session Laws); (2) beginning on September 1, 1993, ADEQ was authorized only to issue "unitary" permits, i.e., permits which covered both authority to install and operate a source (see Chapter 299, §14 of the 1992 Arizona Session Laws); and (3) permits issued after September 1, 1993 have a five year life (see Chapter 299, §14, of the 1992 Arizona Session Laws amending ARS §49-426.F). Based on these statutory provisions, it is clear that the Agency has authority to include permit conditions from an expiring "unitary" permit in the new renewal permit; however, the expiring permit has no continuing legal effect after the renewal permit is issued. For this reason, it is inappropriate to list a prior permit as an applicable requirement or make statements that suggest that such permits have some type of continuing effect.

For the reasons discussed above, all references to prior installation permits or permits issued after September 1, 1993 that suggest that such permit terms continue to be enforceable should be deleted from the draft permit and the Technical Review and Evaluation of Application document. (APS believes that it is appropriate to list prior permits as the source for permit terms and conditions where appropriate)

## **Summary Tables**

**APS Comment 4:** Page 4, Column 1. Insert the following words directly below the words "Primary Fuel - Coal: Secondary Fuel - Natural Gas, Natural gas is combusted alone or with coal for unit startup or flame stabilization." This language simply clarifies what fuels are burned in Unit 1.

**APS Comment 5:** Page 4, Columns 3, 5, 6, and 7, Row 3. Cholla Unit 1 is regulated for NOx by 40 CFR 76. Therefore, the emission limitation subject to Cholla Unit 1 should be listed in this row as follows:

- A. Column 3. Add the words "0.45 lb/mmBtu annual average."
- B. Column 5. Add the words "Part 75 CEMs."
- C. Column 6. Add the words "Part 75 Requirements."
- D. Column 7. Add the words "Part 75 CEMs."

**APS Comment 6:** Page 4, Column 1, Row 2. Insert the following words directly below the words "Primary Fuel - Coal": "Secondary Fuel - Fuel Oil, Fuel Oil is combusted alone or with coal for unit startup or flame stabilization." This language clarifies what fuels are burned in unit 2.

**APS Comment 7:** Page 4, Column 3, Row 7. Replace the word "and" with the word "or." This is necessary to clarify when the standard is applicable to Unit 2.

- **APS Comment 8:** Page 4, Columns 3, 5, 6, and 7, Row 7. Cholla Unit 2 is regulated for NOx by 40 CFR 76. Therefore, the emission limitation subject to Cholla Unit 2 should also be listed in this row as follows:
  - A. Column 3. Add the words "0.45 lb/mmBtu annual average."
  - B. Column 5. Add the words "Part 75 CEMs."
  - C. Column 6. Add the words "Part 75 Requirements."
  - D. Column 7. Add the words "Part 75 CEMs."
- **APS Comment 9:** Page 5, Column 1, Row 1. Steam Boiler Unit 2/3 is subject to A.A.C. R18-2-903.B.3 for sulfur dioxide. Therefore, insert the regulatory citation "A.A.C. R18-2-903.B.3."
- **APS Comment 10:** Page 5, Column 5, Row 1. Insert "in accordance with 40 CFR 60 Subpart Da" inbetween the words CEMs and capable.
- **APS Comment 11:** Page 5, Column 1, Row 2. Insert the following words directly below the words "Primary Fuel Coal": "Secondary Fuel Fuel Oil, Fuel Oil is combusted alone or with coal for unit startup or flame stabilization." This language simply clarifies what fuels are burned in Unit 3.
- **APS Comment 12:** Page 5, Column 3, Row 4. Replace the word "and" with the word "or." This is necessary to clarify when the standard is applicable.
- **APS Comment 13:** Page 5, Columns 3, 5, 6, and 7, Row 4. Cholla Unit 3 is regulated for NOx by 40 CFR 76. Therefore, the emission limitation subject to Cholla Unit 3 should also be listed in this row as follows:
  - A. Column 3. Add the words "0.45 lb/mmBtu annual average."
  - B. Column 5. Add the words "Part 75 CEMs."
  - C. Column 6. Add the words "Part 75 Requirements."
  - D. Column 7. Add the words "Part 75 CEMs."
- **APS Comment 14:** Page 5, Columns 5 and 7, Row 5. Unit 3 is subject to the sulfur dioxide emission limitations of 1.2 pounds per million Btu for solid fossil fuel and 0.8 pounds per million Btu for liquid fossil fuel contained in A.A.C. R18-2-903.3.c. Compliance is determined by using the Reference method tests approved in 40 CFR 60 Subpart D. Unit 3 is not subject to 40 CFR 60 Subpart Da standards. The draft permit language incorrectly establishes sulfur dioxide monitoring requirements in accordance with 40 CFR 60 Subpart Da. Therefore, the emission limitation subject to Cholla Unit 3 should be listed in this row as follows:
  - A. Column 5. Replace "Da" with "D."
  - B. Column 7. Add the words "Annual performance test using methods and procedures specified in 40 CFR 60 Subpart D."
- **APS Comment 15:** Page 5, Column 1, Row 3. Insert the following lines directly below the words "Primary Fuel Coal": "Secondary Fuel Fuel Oil, Fuel Oil is combusted alone or with coal for unit startup or flame stabilization." This language simply clarifies what fuels are burned in Unit 4.
- **APS Comment 16:** Page 5, Column 1, Row 3. Replace the two lines directly below the words "Alternate

Fuels" with the following: "Used Oil or Used Oil Fuel co-fired with coal." This language simply clarifies what fuels are burned in Unit 4.

**APS Comment 17:** Page 6, Column 3, Row 1. Replace the word "and" with the word "or." This is necessary to clarify when the standard is applicable.

**APS Comment 18:** Page 6, Columns 3, 5, 6, and 7, Row 1. Cholla Unit 4 is regulated for NOx by 40 CFR 76. Therefore, the emission limitation subject to Cholla Unit 4 should also be listed in this row as follows:

- A. Column 3. Add the words "0.45 lb/mmBtu annual average."
- B. Column 5. Add the words "Part 75 CEMs."
- C. Column 6. Add the words "Part 75 Requirements."
- D. Column 7. Add the words "Part 75 CEMs."

**APS Comment 19:** Page 6, Column 5, Row 2. Unit 4 is subject to 40 CFR 60 Subpart D for sulfur dioxide. Therefore the reference to Subpart Da should be replaced with Subpart D.

**APS Comment 20:** Page 6, Column 4, Row 3. Cholla Unit 4 is equipped with a hot side electrostatic precipitator (ESP) for particulate removal. This ESP is designed to remove particulate matter, including metal compounds and therefore should be listed in this cell as a control measure.

#### **APS Comment 21: Applicability of Certain Emission Limits**

The draft permit attempts to impose the particulate matter standard for unclassified sources (A.A.C. R18-2-730.A) on several minor point sources of emissions at the Cholla Power Plant when such limitations are unauthorized and uncalled for under ADEQ's rules. Article 7 of Chapter 2 of Title 18 of the Arizona Administrative Code (A.A.C. R18-2-701 et seq.) contains performance standards that apply to existing stationary sources (see title of Article 7 and A.A.C. R18-2-702.A) including the unclassified source rule. This Article and its predecessors have a long history that must be understood and considered to determine how, and to what stationary sources, the individual performance standards apply.

Prior to September 25, 1990, the Performance Standards contained in subsection A of the unclassified source rule explicitly applied only to existing major stationary sources. The rule provided:

No <u>existing major stationary source</u> which is not otherwise covered under any other Section of these Rules shall cause or permit the emission of pollutants at rates greater than the following . . . .

A.A.C. R18-2-502.A (1989) (emphasis added).

The intent of the unclassified source rule was clear. It applied only to existing major stationary sources. It was intended to impose emission limitations on existing major stationary sources for which no specific emissions limitations had been promulgated. It was not intended to apply to (1) major stationary sources which were already subject to existing stationary source standards or (2) to minor stationary sources. It therefore did not apply to individual emission points of sources that fell within these two categories of stationary sources.

This intent was reinforced by the definition of "stationary source" which was contained in the regulations at that time. It provided in relevant part:

"Stationary source" means any building, structure, facility or installation which emits or may emit any air pollutant subject to regulation under this Chapter.

. . . . .

b. "Building", "structure", "facility", or "installation" means, for sources located in attainment areas, <u>all of the pollutant-emitting activities</u> which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same two digit code) as described in the "Standard Industrial Classification Manual, 1972", as amended by the 1997 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

A.A.C. R18-2-101.95 (1989) (emphasis added). Thus, a stationary source included all of the pollutant-emitting activities of the source, even if some of those activities were not subject to emissions limitations.

The rules in place prior to 1990 took an approach that was consistent with the federal New Source Performance Standards and federal National Emission Standards for Hazardous Air Pollutants, both of which Arizona incorporated into its rules. That approach was to impose emission limits on significant emissions points or activities for categories of sources, but not impose emission limits on minor or de minimis emission points or activities in those categories of sources.

On September 25, 1990, the air quality rules were amended. The purpose of the amendments was to address lack of conformity with certain federal requirements and deficiencies in the rule language, style, and format. (See Concise Explanatory Statement, p. 1.) The Concise Explanatory Statement stated that the rules for unclassified sources had been reorganized and renumbered. There is absolutely no indication that the applicability of the unclassified source rule was intended to be expanded to additional sources. (In contrast, with regard to the general opacity standard, the Concise Explanatory Statement states that the amendments clarify the applicability of this standard throughout the Article.) (See Concise Explanatory Statement, p. 2.)

Subsection A of the unclassified source rule was amended to read:

No <u>existing source</u> which is not otherwise subject to standards of performance under this Article or Article 8 or 9 shall cause or permit the emission of pollutants at rates greater than the following ....

A.A.C. R18-2-530.A (1990) (emphasis added).

Significantly, at the same time the language was changed in the unclassified source rule, the definition of "existing source" was also amended to read:

"Existing source" means any source which does not have an applicable new performance standard under Article

A.A.C. R18-2-101.62 (1990). The use of new source performance standards as the determining factor for whether a source was an existing source subject to the existing source performance standards shows ADEQ's intent that the new source performance standards approach of setting emission limits for the significant emission points for categories of sources, but not imposing emission limits on minor or de minimis emission points in those categories of sources, which applied under the prior rule, would continue to apply under the amended rules.

Indeed, during the rulemaking, APS submitted comments about the need to modify the proposed version of A.A.C. R18-2-530.A to clarify that the rule would not apply to a source that is subject to Existing Source Performance Standards, New Source Performance Standards, or National Emission Standards for Hazardous Air Pollutants. The Agency agreed that A.A.C. R18-2-530.A was not intended to apply to sources subject to any of these other programs and made the suggested changes. (See Concise Explanatory Statement, p. 48.)

Sometime after 1990, the Agency began to take the position that A.A.C. R18-2-730.A applied to all emission units or activities -- not just major stationary sources -- that were not otherwise covered by existing stationary source standards. This change in position is both contrary to the regulatory history and the plain language of A.A.C. R18-2-730.A.

The Cholla Power Plant consists of four coal-fired steam generating units, associated air pollution control equipment and auxiliary equipment necessary to generate electricity. Unit 1 commenced construction before August 17, 1971, the date for determining whether the New Source Performance Standards ("NSPS") of 40 CFR Part 60, Subpart D, apply. Accordingly, Unit 1 is an existing source under current A.A.C. R18-2-101.38, and is subject to the standards of performance for existing fossil-fuel fired steam generators found at current A.A.C. R18-2-703. Units 2, 3, and 4 commenced construction after August 17, 1971, and before September 18, 1978, the dates for determining whether the NSPS of 40 C.F.R. Part 60, Subpart D or Subpart Da, apply. Accordingly, Units 2, 3, and 4 are new sources under current A.A.C. R18-2-101.70, and are subject to the general provisions and standards of performance for new fossil-fuel fired steam generators referred to in current A.A.C. R18-2-901.1, 2, and 3, and current A.A.C. R18-2-903. (Under the pre-1990 air quality rules, all four units were classified as existing units because the definition of existing source covered all sources which commenced replacement, erection, installation or making a major alteration prior to May 14, 1979. In addition, Units 2, 3, and 4 were subject to the federal New Source Performance Standards.)

The 1990 amendments to the regulations did not change the definition of "stationary source" in any way that is significant to these comments. The Cholla Power Plant which, as explained above, consists of four coal-fired steam generating units, associated air pollution control equipment and auxiliary equipment necessary to generate electricity, is classified in Major Group 49 in the Standard Industrial Classification Manual. Therefore, the pollutant emitting activities relating to associated air pollution control equipment and auxiliary equipment, such as the flyash silo baghouse, lime slaking vent wet scrubber, lime silo baghouse, and cooling towers are subject to the standards of performing referenced in the preceding paragraph because they are part of the stationary source.

Under the plain language of current A.A.C. R18-2-730.A, this section does not apply to any equipment which is part of a source that is subject to existing source standards of performance. Therefore, this section does not

apply to the flyash silo baghouse, lime slaking vent wet scrubber, lime silo baghouse, cooling towers, or any other associated or auxiliary equipment, even though the standards of performance applicable to the source do not specify a particulate emission limitation for these minor point sources. (Because the referenced standards do not specify an opacity standard for these types of associated and auxiliary equipment, the 40% opacity limitation established in A.A.C. R18-2-702.B applies to them.)

If it had been the intent of the agency, in adopting A.A.C. R18-2-730, to apply the regulation to an activity whenever a particular pollutant is not addressed by applicable standards of performance, the agency easily could have done so. For example, A.A.C. R18-2-702, which is a pollutant-specific regulation, clearly shows that the agency knew how to draft a regulation imposing an emission limit for a pollutant not addressed by applicable standards of performance. A.A.C. R18-2-730 is not such a regulation.

ADEQ has already determined that the above analysis is correct. In 1992, ADEQ issued a draft installation permit to APS for the flyash silo baghouse. The draft permit contained the requirement to comply with A.A.C. R18-2-730 (A.A.C. R18-2-530 at that time) and to install sampling ports and platforms for performance tests. APS submitted comments on the draft permit similar to those contained in these comments. After consideration, the Agency deleted all references to the emission limitation and stack sampling facilities and included only the generic 40% opacity requirement and the requirement to install the baghouse in compliance with 40 CFR § 60.11(d). ADEQ must follow that precedent and do the same in this Title V permit. Therefore, all references to A.A.C. R18-2-730.A and the emission limitation contained in that section should be deleted from the draft permit because that section applies only to an existing source which is not otherwise subject to standards of performance under Articles 7, 9 or 11 of ADEQ's regulations on air quality.

APS notes that the pre-1990 version of the unclassified source rule is contained in the State Implementation Plan (SIP) -- not the current version of A.A.C. R18-2-730. If ADEQ does not modify its position on the applicability of this rule, it will mean that the SIP and the current rules will be inconsistent and that A.A.C. R18-2-730.A is not federally enforceable.

APS believes that ADEQ's change in position on the applicability of the unclassified source rule is a violation of the Arizona Administrative Procedure Act.

**APS Comment 22:** Page 7, Column 4, Row 3. Add the words "or other acceptable means" to the end of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 23:** Page 7, Column 4, Row 4. Add the words "good modern practices, such as" at the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 24:** Page 7, Column 4, Row 5. Add the words "or other reasonable means" to the end of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 25:** Page 7, Column 4, Row 6. Add the words "reasonable precautions, such as" to the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 26:** Page 7, Column 4, Row 7. Add the words "reasonable precautions, such as" to the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 27:** Page 7, Column 4, Row 8. Add the words "reasonable precautions, such as" to the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 28:** Page 8, Column 4, Row 1. Replace the permit language with the following: "minimize fall, and in such manner, or spray bars or wetting agents, as to prevent excessive amounts of particulate matter." This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 29:** Page 8, Column 4, Row 2. Add the words "reasonable precautions, such as" to the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 30:** Page 8, Column 4, Row 3. Add the words "good modern practices, such as" to the beginning of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

**APS Comment 31:** Page 8. It appears that the applicable requirement for solvent degreasing was omitted from the summary table. Therefore, solvent degreasing should be inserted after row 4 in the summary table.

**APS Comment 32:** Page 8, Column 3, Row 6. Insert the words "excluding operation of cold equipment for the first ten minutes" at the end of this language. This is done to make permit language consistent with the language contained in the applicable requirement.

## **Attachment "A"**

APS Comment 33: Page 10, Section VII.A. Compliance certification deadline and certification time frames should be consistent with reporting requirements contained within existing applicable requirements as much as possible to prevent duplication of report generation and submittals. For example, the certification time frames as currently written do not allow a source to use quarterly reports required by NSPS and Acid Rain regulations for submittal of the compliance certification. However, if the certification time frame was for the same time period as the NSPS and Acid Rain requirements, i.e., quarterly, January-March, April-June, July-September, October-December, then the NSPS reports could merely be attached to the compliance certification. To accomplish this without reducing the allowed reporting time frame for NSPS and Acid Rain reports of 30 days following the end of each quarter, a source should be allowed additional time beyond the 30 day period for the compliance certification deadlines. APS requests a 15 day period beyond the quarterly reporting deadline be provided in the

permit to allow the Plant to receive EPA's feedback on the quarterly Acid Rain reports (EDRs) and to fully analyze the Plant's compliance status before submitting a compliance certification. Therefore, APS requests that the draft permit language be replaced with the following:

"Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year."

**APS Comment 34:** Page 13, Section XI.B.1, Line 1. Replace the phrase "For a situation lasting more than 24 hours which constitutes a violation" with: "For deviations lasting more than 24 hours." This change clarifies that whether a deviation is a violation is not relevant to determining the number of deviations that have occurred. All that is relevant is that a deviation last more than 24 hours in order for there to be multiple deviations.

**APS Comment 35:** Page 13, Section XI.B.2. In the last sentence of this condition, replace the words "deviation occurred" with: "permittee becomes aware of the deviation." This change is necessary because it would be impossible to know immediately of the occurrence of all deviations due to the complexity and volume of conditions contained in the permit. It is unreasonable to require a permittee to do something that is practically impossible.

**APS Comment 36:** Page 14, Section XII.D addresses the submittal of compliance schedules. APS has two concerns with this condition. First, based on conversations with agency personnel, we understand that the intent is that a permit deviation be continuous for 72 hours in order to trigger a compliance schedule requirement. This intent needs to be clarified. Second, APS is concerned that this paragraph attempts to impose a one-size-fits-all compliance schedule requirement on all sources subject to Title V permitting. In more complex sources, such as the Cholla Power Plant, it may be impossible to determine what the cause of a deviation is, exactly how the deviation can be corrected, let alone determine time frames and schedules for the implementation of the corrective action, all within the 21 day time period required in this permit condition. APS believes that a much better solution would be to require a source to contact the director within 7 days of the occurrence of the deviation to discuss and agree upon the time frame for the submittal of a compliance schedule. This allows the agency and the source to discuss the particulars of the deviation and determine in a more flexible way of how the deviation should be addressed. This approach still provides a mechanism for involving ADEQ early in determining how to address a continuous deviation, which should satisfy the agency's enforcement needs.

**APS Comment 37:** Page 15, Section XVI addresses facility changes without permit revision. APS has three main comments for this section. First, APS suggests that ADEQ insert the regulatory language from R18-2-317 addressing the trading or netting of emissions increases and decreases within a permitted facility. APS recognizes that such trading may occur only where the state implementation plan (SIP) allows. However, APS believes that the regulatory language should be retained in the permit so that at such time as the SIP is amended to encourage trading or netting, the permit will not need to be amended. This is consistent with the inclusion of other provisions of A.A.C. R18-2-317 in the draft permit which address emissions trading, see section XVI.C.4, 5 and 6.

Second, section XVI.A.1 refers to modifications under Title 1 of the Act or A.R.S. § 49-401.01(18). This language comes directly from the state regulation; however, the state regulation has an erroneous citation to the definition of modification. The correct citation to the definition of modification is A.R.S. § 49-401.01(19).

Third, as section XVI currently reads, a source would be required to notify ADEQ every time an identical piece of equipment replaces an older piece of equipment. This would mean that even changing bolts or nuts on a flange would be subject to the notification requirements. APS understands that this is not ADEQ's intent. APS further understands that the Agency's intent is to be notified of changes which may affect emissions, i.e., either increase emissions or decrease emissions. The term "change" is not defined in the state regulations. APS proposes adding a clause in section XVI.C which makes it clear that the agency's intent is that sources notify under 317 when a change may result in an increase or decrease in emissions. The following phrase should be inserted after "For each such change under subsections A and B of this Section,": "which may result in an increase or decrease in emissions,". This change would clarify that changes at the plant which are emissions neutral would not need to be notified. We believe the language we have proposed clearly represents the agency's intent for this notification requirement.

**APS Comment 38:** Page 17, Section XXI.C. Insert the words "sulfur dioxide" in the first sentence between the words "of" and "allowances."

## **Attachment "B"**

**APS Comment 39:** Page 19, Section I.B.1. No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in PSD Permit Number M170843S1-98, that this PSD permit number should be added as the reference. Also, since compliance coal is required to meet the sulfur dioxide emission limitation contained in A.A.C. R18-2-903 of 0.8 lb/mmBtu, the last "0" should be deleted from the emission limit of 0.80. This change will make the permit definition consistent with the regulations and conditions contained in prior permits and will avoid a level of precision that is not called for in any relevant applicable requirement.

**APS Comment 40:** Page 19, Section I.B.3. No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.2, that this rule should be added as the reference. Also, in previous conversations with members of your staff, they have said that the purpose of this definition is to clarify when a New Source Performance Standard (NSPS) Unit begins a startup for purposes of opacity reporting. APS suggests a few minor technical changes to the draft language to ensure that all opacity that results from a startup is properly reported. Therefore, replace the second sentence of this definition with: "Startup, for opacity purposes, begins when any forced draft, induced draft, or booster induced draft fan of the unit is turned on for any purpose."

**APS Comment 41:** Page 19, Section I.B.4. No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.2, that it should be added as the reference. Also, in previous conversations with members of your staff, they have said that the purpose of this definition is to clarify when a New Source Performance Standard (NSPS) Unit begins

a shutdown for purposes of opacity reporting. APS suggests a few minor technical changes to the draft language to ensure that all opacity that results from a shutdown is properly reported. Therefore, replace the second and third sentences of this definition with: "Shutdown, for opacity purposes, begins when the unit begins to drop load to go of line. Shutdown, for opacity purposes, ends when all fans of the unit are turned off."

**APS Comment 42:** Page 19, Section I.B.5. No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.2, that it should be added as the reference.

**APS Comment 43:** Page 20, Section I.G. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule stipulates what elements a permit should include. Specifically, A.A.C. R18-2-306.A.2 requires that a permit include enforceable emission limitations and standards, including those operational requirements and limitations that ensure compliance. APS does not feel that a requirement to "have on staff a person that is certified in EPA Reference Method 9" is either an enforceable emission limitation, a standard, an operational requirement, or a limitation that ensures compliance. Further, it is true that the performance of a Reference Method 9 on a periodic basis is required in other permit conditions to ensure compliance with emission limitations. This does not justify the requirement to have on staff a person certified in this method to ensure these other conditions are performed. The plant must perform these other permit conditions, as required in the permit, by a certified person. Therefore, it is the responsibility of the plant to have a certified person available, when needed, to perform the monitoring required in the permit. Whether that person is an employee located at the plant or within the company, a contractor, or from other resources does not matter. Therefore, this condition should be deleted from the permit.

**APS Comment 44:** Page 20, Section I.H. As currently written, this condition would require the submittal of summary reports for the six months ending on the day the compliance certification is submitted. This condition is virtually impossible to satisfy. It should be modified consistent with the comments made in point 31, above.

**APS Comment 45:** Page 20, Section II.A.2. The condition that requires results to be rounded to two decimal places contained in A.A.C. R18-2-703.D is an integral part of the emission equation and should be included in the permit. Therefore, insert the following language immediately following the equation, "The actual particulate matter values shall be calculated from the equation and rounded off to two decimal places." Also, the reference for this requirement is incomplete, A.A.C. R18-2-703.C and 703.D should be added.

**APS Comment 46:** Page 21, Section II.A.4. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. The existing permit conditions, pertaining to emission limits while combusting different fuels, restrict what types of fuel Cholla may combust. Therefore, the inclusion of a condition, which specifies a "Fuel Limitation" is redundant, not authorized and therefore is not required. Unless ADEQ determines a reference that clearly requires this permit condition, this condition should be deleted from the permit.

**APS Comment 47:** Page 21, Section II.B.1. The reference to the origin of and authority for this permit term listed is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit

shall include. It does not provide authority for ADEQ to include permit conditions. Installation Permit No. 1247 requires that APS install, continuously operate and maintain a lime slurry scrubbing system to control the emissions of sulfur dioxide. Therefore, the reference to A.A.C. R18-2-316.A.2 should be replaced with the following: "Installation Permit No. 1247".

**APS Comment 48:** Page 21, Section II.B.2. The reference to the origin of and authority for these permit terms listed in this section of the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. Therefore, the inclusion of a condition that stipulates "Air Pollution Control Requirements" is not authorized. Therefore, unless ADEQ determines a reference that clearly requires these permit conditions, these conditions should be deleted from the permit.

**APS Comment 49:** Page 21, Section II.C.1.a. APS believes that an integral part of the requirements to operate the continuous emission monitors has been left out of the draft language. Specifically, A.A.C. R18-2-313.A.2 requires sources to operate their CEMs when the Unit is in operation. The CEMs need not be operated during periods of time that the Unit is not operating. Therefore, insert the following language to the end of the sentence, "except when the unit is not in operation." Accordingly, the reference to this language, A.A.C. R18-2-313.A.2, should be added.

**APS Comment 50:** Page 21, Section II.C.1.b. To clarify the requirements of this permit condition, a definition of "boiler operating day" is needed. Insert the following language immediately following the words boiler operating day, ", as defined in 40 CFR 60.42a."

**APS Comment 51:** Page 22, Section II.C.1.c. The reference to A.A.C. R18-2-306.A.3.b is incorrect. A.A.C. R18-2-306.A.3.b pertains to the requirement of periodic monitoring where an applicable requirement does not contain sufficient monitoring to ensure compliance. Section II.C.c specifies installation and operational requirements for the sulfur dioxide and oxygen CEMs, which is required by A.A.C. R18-2-313 and is therefore, not periodic monitoring. APS believes the correct reference for this section is A.A.C. R18-2-313.

**APS Comment 52:** Page 22, Section II.C.1.d. The reference to A.A.C. R18-2-306.A.3.b is incorrect. A.A.C. R18-2-306.A.3.b pertains to the requirement of periodic monitoring where an applicable requirement does not contain sufficient monitoring to ensure compliance. Section II.C.c specifies installation and operational requirements for the opacity CEMs, which is required by A.A.C. R18-2-313 and is therefore not periodic monitoring. APS believes the correct reference for this section is A.A.C. R18-2-313.

**APS Comment 53:** Page 23, Section II.C.1.d(2)(b).ii. The reference to A.A.C. R18-2-306.A.3.b is incorrect. A.A.C. R18-2-306.A.3.b pertains to the requirement of periodic monitoring where an applicable requirement does not contain sufficient monitoring to ensure compliance. The correct reference for this permit condition is A.A.C. R18-2-313.D.6.

**APS Comment 54:** Page 23, Section II.C.1.d(2)(b).iii, iv, and II.C.d(2)(c). These permit conditions are already required by Section II.C.d.(1) on page 22 of the draft permit. Therefore, these conditions are duplicative and should be deleted from the permit.

**APS Comment 55:** Page 23, Section II.C.1.d(2)(e). The reference to A.A.C. R18-2-306.A.3.b is incorrect. A.A.C. R18-2-306.A.3.b pertains to the requirement of periodic monitoring where an applicable requirement does not contain sufficient monitoring to ensure compliance. The data reduction requirements for Unit 1 are contained in A.A.C. R18-2-313.E and are therefore not periodic monitoring. APS believes the correct reference for this section is A.A.C. R18-2-313.E. In addition, the title to this section "Data Reduction and Missing Data" is incorrect. There are no existing source missing data requirements for opacity. Therefore, the title should be changed to say, "Data Reduction Procedures."

**APS Comment 56:** Page 24, Section II.C.1.e(1)(d). Insert the word "the" immediately following the word "include." This is being done for grammatical correctness.

**APS Comment 57:** Page 24, Section II.C.1.e(1)(d). The reference to A.A.C. R18-2-306.A.5.a is incorrect. A.A.C. R18-2-306.A.5.a pertains to submittal of reports of any required monitoring every six months. The report stipulated by this section, 30 day sulfur dioxide removal efficiency, is an applicable requirement required by Installation Permit No. 1247. Therefore, the correct reference should be A.A.C. R18-2-306.A.5, which requires a permit to contain all applicable reporting requirements.

**APS Comment 58:** Page 24, Section II.C.1.e.(4). Attachment "A," section XII.B of this draft permit requires that the "Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application." This permit condition would only require retention of records for two years. APS believes that the permit condition contained in Attachment "A" is sufficient to ensure that the record keeping required by A.A.C. R18-2-313.E.6 is complied with. Because this permit condition is redundant and erroneous, it should be deleted from the permit. A reference to A.A.C. R18-2-313.E.6 should be added to Section XII.B of Attachment "A."

**APS Comment 59:** Page 24, Section II.C.1.e(5). No reference to the origin of and authority for this condition is listed in the permit as required by A.A.C. R18-2-306.A.2.a. This term is a requirement of the Acid Rain Program for which the applicable requirements are contained in a separate attachment to this permit, (Attachment "F"). Therefore, this permit condition should be deleted from Attachment "B."

**APS Comment 60:** Page 24, Section II.C.2. This section pertains to Periodic Monitoring required by A.A.C. R18-2-306.A.3.b. Therefore, for technical correctness and clarity, change the title of this section to read: "Periodic Monitoring for Particulate Matter."

**APS Comment 61:** Page 24, Section II.C.2.a. This section pertains to periodic monitoring of particulate matter using an opacity CEMs installed and operated for opacity in accordance with A.A.C. R18-2-313. The particulate matter emission limit is contained in A.A.C. R18-2-703.C.2. This emission limit applies, in part, to "Installations in which fuel is burned for the primary purpose of producing power," A.A.C. R18-2-703.A.1. Further, the heat input required for determination of the operational rate at which tests are to be performed and calculation of emissions limits must be determined by certain ASTM methods, which require samples of the fuel (coal) being burned. If fuel is not being burned, then the emission limit can not be calculated. Because of this, the particulate matter emissions limit does not apply during times that fuel is not being burned. Also, A.A.C. R18-2-

312 contains language that: (1.) States that "Operations during periods of Start-up, Shutdown, and malfunction shall not constitute representative conditions of performance tests", (2.) Allows for events which sample is lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, compliance may be determined from the average of two runs. This language indicates that ADEQ intended that the particulate matter emission limit apply during periods of time that the unit operates for three continuous hours, with the absence of start-ups, shutdowns, and malfunctions. To clarify this in the permit, APS suggests that the following language be added to the end of the first sentence of this section, "during periods when the unit combusts fuel for the entire three hour period." Also, to clarify when a compliance schedule must be submitted, APS suggests that the word "consecutive" be inserted in the last sentence immediately following the number "72." This appears on page 25 of the draft permit.

**APS Comment 62:** Page 25, Section II.C.3. Attachment "A," section XII.B of this draft permit requires that the "Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. As stated in comment No. 56, APS believes that the permit condition contained in Attachment "A" is sufficient to ensure that the record keeping, required by A.A.C. R18-2-313.E.6, which requires records of all information reported in the quarterly summaries, and all other data collected as necessary to convert monitoring data to the units of the applicable standard, is complied with. Coal analyses reports for Unit 1 are required to convert the outlet CEMs sulfur dioxide values into the applicable standard of 80 percent removal efficiency. If this permit condition remains in the permit, it will increase the permittee's reporting obligations in the semi annual compliance reports, while providing no greater assurance of compliance. Therefore, this permit condition is redundant and should be deleted from the permit. Also, the reference to A.A.C. R18-2-306.A.3.b is incorrect. A.A.C. R18-2-306.A.3.b pertains to the requirement of periodic monitoring, where an applicable requirement does not contain sufficient monitoring to ensure compliance.

**APS Comment 63:** Page 25, Section II.D.1, II.D.2, and II.D.3.a. The reference to A.A.C. R18-2-306.A.3.a is incorrect. While A.A.C. R18-2-306.A.3.a specifies that all emissions monitoring and analysis procedures or test methods required under the applicable requirements be included in a permit, it does not specifically require any monitoring or testing to be performed. APS believes that A.A.C. R18-2-312.A provides the authority for the director to require such testing. Therefore, the correct reference for these conditions should be A.A.C. R18-2-312.A.

**APS Comment 64:** Page 26, Section III.A.4.a. The reference required by A.A.C. R18-2-306.A.2.a is incomplete. The reference should include both 40 CFR 60.44(a) and 60.44(a)(3).

**APS Comment 65:** Page 27, Section III.A.5. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. The existing permit conditions pertaining to emission limits while combusting different fuels restricts what types of fuel Cholla may combust. Therefore, the inclusion of a condition, which specifies a "Fuel Limitation" is redundant, not authorized and therefore is not required. Unless ADEQ determines a reference that clearly requires this permit condition, APS suggests that this condition be deleted from the permit.

**APS Comment 66:** Page 27, Section III.B.1.a and III.B.1.b. The reference to the origin of and authority for these permit conditions listed in the draft permit include A.A.C. R18-2-306.A.2. The language contained in this rule stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. Therefore, delete the reference to A.A.C. R18-2-306.A.2 from the permit. The remaining references correctly reference the origin of and authority for these conditions.

**APS Comment 67:** Page 27, Section III.B.2.a, III.B.2.b, and Page 28, Section III.B.2.c. The reference to the origin of and authority for these permit conditions listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. Therefore, APS believes "A.A.C R18-2-306.A.2" is incorrect and that the correct reference for these requirements is "40 CFR 60.11(d)."

**APS Comment 68:** Page 28, Section III.B.2.d(3). Replace the word "compliance" with the word "capability." This change is requested to ensure that the permit condition has the same meaning as the referenced applicable requirement.

**APS Comment 69:** Page 29, Section III.C.1.c(3). This section specifies the requirements for the proper operation of the sulfur dioxide and oxygen CEMs for Unit 2, including when the CEMs must be in service. A very important aspect of the monitoring requirements has been omitted from this section. 40 CFR 60.47a(f) includes requirements that the source obtain a minimum amount of data during source operation. This provision should be included as a monitoring requirement. Therefore, add the following language to the end of section III.C.1.c(3), "Permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days." Also, the reference to 40 CFR 60.47a(f) should be added.

**APS Comment 70:** Page 29, Section III.C.1.d(1), III.C.1.d(2). No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required by 40 CFR 60.13 that this citation should be added as the reference.

**APS Comment 71:** Page 29, Section III.C.1.d(3). No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required to be in the permit by A.A.C. R18-2-306.A.3.a, this reference should be added.

**APS Comment 72:** Page 29, Section III.C.1.d(4). No reference to the origin of and authority is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required to be in the permit by A.A.C. R18-2-306.A.3.a, this reference should be added.

**APS Comment 73:** Page 29, Section III.C.1.e. Because of the introductory clause in the first sentence of this permit condition, the relationship between this condition and the condition in section III.C.3.c(3) is confusing. Therefore, the first sentence of this section should be deleted, based on comment No. 67. The second sentence should be re-written to reflect the changes based on comment No. \_\_ as follows, "If the Permittee cannot obtain CEMs data for at least 18 hours in at least 22 out of 30 successive boiler operating days as required in condition III.C.3.c(3), Permittee shall supplement SO<sub>2</sub> emission data with other monitoring systems approved by the Director or the following reference methods and procedures:".

**APS Comment 74:** Page 29, Section III.C.1.e(4). Insert the following language at the end of the sentence, "may be used." This change is requested to ensure that the permit condition has the same meaning as the referenced applicable requirement.

**APS Comment 75:** Page 30, Section III.C.1.f(1). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this requirement is contained in 40 CFR 60.13 that this reference should be added.

**APS Comment 76:** Page 30, Section III.C.1.f(2)(a). The reference to 40 CFR 60 Appendix B, PS1 5.2 as the origin of and authority for this permit term as required by A.A.C. R18-2-306.A.2.a is incorrect. Section 5.2 of PS1 specifies the Performance Specifications for opacity monitors. This section of PS1 does not specify calibration span values or frequencies. Therefore, this reference should be deleted from the permit. The remaining reference of 40 CFR 60.13(d)(1) is correct.

**APS Comment 77:** Page 31, Section III.C.1.f(2)(e). The title to this section "Data Reduction and Missing Data" is incorrect. This section references 40 CFR 60.13(h), which pertains to data reduction requirements for recorded opacity data. It does not pertain to opacity data that is not recorded, (Missing Data). Therefore, the title should be changed to say, "Data Reduction Procedures."

**APS Comment 78:** Page 31, Section III.C.1.g(2). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that this term is a requirement of the Acid Rain Program for which the applicable requirements are contained in a separate attachment to this permit, (Attachment "F"). Therefore, this permit condition should be deleted from Attachment "B."

**APS Comment 79:** Page 32, Section III.C.1.g(c).ii. The following phrase from 40 CFR 60.47a(g) has been omitted from this paragraph, "except for data obtained during startup, shutdown, or emergency conditions." Without this phrase, 30 successive boiler operating day averages where a startup, shutdown, or emergency condition existed would be calculated including these hourly averages which would result in inaccurate data. Therefore, this phrase should be added to the existing permit language. The phrase should be inserted on the fourth line, inside the existing parenthesis, immediately following the word "days."

**APS Comment 80:** Page 35, Section III.C.2. This section pertains to Periodic Monitoring required by A.A.C. R18-2-306.A.3.b. Therefore, for technical correctness and clarity, change the title of this section to read: "Periodic Monitoring for Particulate Matter."

**APS Comment 81:** Page 35, Section III.C.2.a. This section pertains to periodic monitoring of particulate matter using an opacity CEMs, installed and operated in accordance with 40 CFR 60.13. The particulate matter emission limit is contained in 40 CFR 60.42(a)(1). This emission limit applies to "fossil-fuel-fired steam generators," 40 CFR 60.40(a). The emission limit rate is 0.10 lb/mmBtu derived from fossil fuel," 40 CFR 60.42(a). Therefore, the particulate matter emission limit does not apply during times that fossil fuel is not burned. To clarify this in the permit, APS suggests that the following language be added to the end of the first sentence of this section: "during periods that the unit combusts fuel for the entire three hour period.". Also, to clarify when

a compliance schedule must be submitted, APS suggests that the word "consecutive" be inserted in the last sentence immediately following the number "72".

**APS Comment 82:** Page 35, Section III.D.1 and III.D.2. The reference to A.A.C. R18-2-306.A.3.a is incorrect. While A.A.C. R18-2-306.A.3.a specifies that all emissions monitoring and analysis procedures or test methods required under the applicable requirements be included in a permit, it does not specifically require any monitoring or testing to be performed. APS believes that 40 CFR 60.8(a) provides the authority for the director to require such testing. Therefore, the reference to "A.A.C. R18-2-306.A.3.a" should be replaced with "40 CFR 60.8(a)."

**APS Comment 83:** Page 37, Section IV.A.1. This proposed permit condition establishes an emission limit for sulfur dioxide for the combined operation of Unit 2 and Unit 3 of 0.8 pounds per million Btu derived from coal. However, the phrase "derived from coal" does not exist in A.A.C. R18-2-903.3 nor does it exist in PSD Permit No. M170843S1-98. The addition of this language would restrict the applicability of this limit to when both units are firing coal only. This means that **NO** emission limit would apply during periods when oil is fired in one or both of the units. Therefore, the phrase "derived from coal" should be deleted from the permit.

**APS Comment 84:** Page 37, Section IV.A.3. Insert the word "the" in the second line between the words "to" and "silos." This change is suggested for grammatical correctness. Delete the phrase "to adequately meet the sulfur dioxide emission limit specified in the preceding paragraph A.1 of this subsection." The contents of this phrase are already addressed by the statement "compliance coal, as defined in paragraph I.B.1 of this attachment,". Letting this phrase remain in the permit would cause confusion.

**APS Comment 85:** Page 39, Section V.A.5. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. The existing permit conditions pertaining to emission limits while combusting different fuels, restrict what types of fuel Cholla be permitted to combust. Therefore, the inclusion of a condition, which specifies a "Fuel Limitation," is redundant, not authorized and therefore is not, required. Therefore, unless ADEQ determines a reference that clearly requires this permit condition, this condition should be deleted from the permit.

**APS Comment 86:** Page 39, Section V.B.1. The reference to the origin of and authority for this permit condition listed in the draft permit includes A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, delete the reference to A.A.C. R18-2-306.A.2 from the permit. The remaining reference of 40 CFR 60.11(d) is adequate.

**APS Comment 87:** Page 40, Section V.B.2.a, V.B.2.b, and V.B.2.c. The reference to the origin of and authority for these permit conditions listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, APS believes A.A.C. R18-2-306.A.2 is incorrect and the correct reference for these requirements is 40 CFR 60.11(d).

**APS Comment 88:** Page 40, Section V.C.1.b. This subsection would specify that Cholla must continuously monitor for NOx utilizing a CEMs. In accordance with 40 CFR 60.45(3), Cholla does not have a requirement to install, operate, and maintain a continuous emissions monitoring system for NOx on Unit 3. However, in accordance with A.A.C. R18-2-306.A.3.b, Cholla must periodically monitor NOx emissions from Unit 3. Cholla has chosen to use the existing NOx CEMs installed for compliance with 40 CFR 75 to periodically monitor NOx emissions for compliance with the NOx emission limitation contained in section V.A.4 of this attachment. Therefore, for technical correctness and permit clarity, APS suggests that this subsection V.C.1.b be moved to a new subsection V.C.3 and the title be changed to read, "Periodic Monitoring for NOx."

**APS Comment 89:** Page 41, Section V.C.1.d(1) and V.C.1.d(2). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.13 that this reference should be added. Also, the references to NOx in section V.C.1.d should be deleted from this subsection because the NOx will be covered in the new NOx periodic monitoring section.

**APS Comment 90:** Page 41, Section V.C.1.d(3). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that this term is required to be in the permit by A.A.C. R18-2-306.A.3.a and therefore, this reference should be added.

**APS Comment 91:** Page 41, Section V.C.1.d(4). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required to be in the permit by A.A.C. R18-2-306.A.3.a. then this reference should be added.

**APS Comment 92:** Page 41, Section V.C.1.e(4). Insert the following language at the end of the sentence: "may be used." This change is requested to ensure that the permit condition has the same meaning as the referenced applicable requirement.

**APS Comment 93:** Page 42, Section V.C.1.f(1). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.13 it should be added as the reference.

**APS Comment 94:** Page 42, Section V.C.1.f(2)(a). The reference to 40 CFR 60 Appendix B, PS1, 5.2 as the origin of and authority for this permit term as required by A.A.C. R18-2-306.A.2.a is incorrect. Section 5.2 of PS1 specifies the "Performance Specifications for opacity monitors." This section of PS1 does not specify calibration span values or frequencies. Therefore, this reference should be deleted from the permit. The remaining reference of 40 CFR 60.13(d)(1) is correct.

**APS Comment 95:** Page 43, Section V.C.1.f(2)(e). The title to this section "Data Reduction and Missing Data" is incorrect. This section references 40 CFR 60.13(h), which pertains to data reduction requirements for recorded opacity data. It does not pertain to opacity data that is not recorded, (Missing Data). Therefore, the title should be changed to say, "Data Reduction Procedures."

**APS Comment 96:** Page 43, Section V.C.1.g(2). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that this term is a requirement of the Acid Rain Program, for which the applicable requirements are contained in a separate attachment to this permit, (Attachment "F"). Therefore, this permit condition should be deleted from Attachment "B."

**APS Comment 97:** Page 44, Section V.C.1.g(4)(c).ii. Unit 3 is subject to the sulfur dioxide emission limitations of 1.2 pounds per million Btu for solid fossil fuel and 0.8 pounds per million Btu for liquid fossil in A.A.C. R18-2-903.3.c. It is not subject to 40 CFR 60 Subpart Da emission limitations. Therefore, the definition for sulfur dioxide periods of excess emissions, should be replaced with the following, " $SO_2$  excess emissions are defined as any three-hour period, during which the average  $SO_2$  emissions from the Steam Boiler Unit 3 stack (arithmetic average of three continuous one-hour periods) as measured by a continuous monitoring system, exceed 1.2 pounds per million Btu for solid fossil fuel or 0.8 pounds per million Btu for liquid fossil fuel."

**APS Comment 98:** Page 44, Section V.C.1.g(6). The reference of origin and authority for this permit condition is PSD Permit No. M170843S1-98, Attachment "B," Condition XV.B.6 which requires "Reports for the Unit 2 portion of Unit 2/3 which comply with the sulfur dioxide reporting requirements in 40 CFR 60.49a." This language clearly excludes the Unit 3 portion of Unit 2/3 from these reporting requirements. There is no language in Permit No. M170843S1-98 which imposes subpart Da reporting requirements for Unit 3. Therefore, this section V.C.1.g(6) in its entirety should be deleted from the permit.

**APS Comment 99:** Page 46, Section V.C.2. This section pertains to Periodic Monitoring required by A.A.C. R18-2-306.A.3.b. Therefore, for technical correctness and clarity, change the title of this section to read: "Periodic Monitoring for Particulate Matter."

APS Comment 100 Page 46, Section V.C.2.a. This section pertains to periodic monitoring of particulate matter using an opacity CEMs installed and operated for opacity in accordance with 40 CFR 60.13. The particulate matter emission limit is contained in 40 CFR 60.42(a)(1). This emission limit applies to "fossil-fuel-fired steam generators,"40 CFR 60.40(a). The emission limit rate is "0.10 lb/mmBtu derived from fossil fuel", 40 CFR 60.42(a). Therefore, the particulate matter emission limit does not apply during times that "fossil fuel" is not burned. To clarify this in the permit, the following language should be added to the end of the first sentence of this section, "during periods that the unit combusts fuel for the entire three hour period". Also, to clarify when a compliance schedule must be submitted, APS suggests that the word "consecutive" be inserted in the last sentence immediately following the number "72".

**APS Comment 101** Page 46, Section V.D.1 and Page 47, Section V.D.2, including V.D.2.a, b, and c. The reference to A.A.C. R18-2-306.A.3.a is incorrect. While R18-2-306.A.3.a specifies that all emissions monitoring and analysis procedures or test methods required under the applicable requirements be included in a permit, it does not specifically require any monitoring or testing to be performed. 40 CFR 60.8(a) provides the authority for the director to require such testing. Therefore, the reference to "A.A.C. R18-2-306.A.3.a" should be replaced by "40 CFR 60.8(a)."

**APS Comment 102** Page 47, Section V.D.3. Unit 3 is subject to the sulfur dioxide emission limitations of 1.2 pounds per million Btu for solid fossil fuel and 0.8 pounds per million Btu for liquid fossil fuel contained in A.A.C.

R18-2-903.3.c. It is not subject to 40 CFR 60 Subpart Da standards. Therefore, section V.D.3 should be deleted and the sulfur dioxide provisions should be relocated to section V.D.2 as follows:

- 1. Change the heading of section V.D.2 to "Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides"
- 2. Insert a new paragraph between the paragraphs "a" and "b" as follows:
  - b. Sulfur Dioxide

EPA Reference Method 6 shall be used to determine the SO<sub>2</sub> concentration at the stack of Steam Boiler Unit 3. [A.A.C. R18-2-901]

- 3. Re-letter "b" to "c."
- 4. Re-letter "c" to "d."
- 5. Re-letter "d" to "e."

**APS Comment 103** Page 49, Section VI.A.5. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. The existing permit conditions, pertaining to emission limits while combusting different fuels, restricts what types of fuel Cholla may combust. Therefore, the inclusion of a condition, which specifies a "Fuel Limitation" is redundant, not authorized and therefore is not required. Unless ADEQ determines a reference that clearly requires this permit condition, this condition should be deleted from the permit.

**APS Comment 104** Page 49, Section VI.A.6. The reference to the origin of and authority for this permit term listed in the draft permit is A.A.C. R18-2-306.A.2. This reference is incorrect. The appropriate references to A.R.S. 49-426.G.1 is contained in the two paragraphs of this condition. The reference to A.A.C. R18-2-306.A.2 is therefore unnecessary, incorrect, and should be deleted.

**APS Comment 105** Page 49, Section VI.B.1.a. The reference to the origin of and authority for this permit condition listed in the draft permit includes A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, delete the reference to A.A.C. R18-2-306.A.2 from the permit. The remaining reference of 40 CFR 60.11(d) is adequate. This permit term is contained in Installation Permit No. 1247 and therefore this Installation Permit No. should be included in the reference.

**APS Comment 106** Page 50, Section VI.B.1.b. The reference to the origin of and authority for this permit condition listed in the draft permit includes A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, delete the reference to A.A.C. R18-2-306.A.2 from the permit. The remaining reference of 40 CFR 60.11(d) is adequate.

**APS Comment 107** Page 50, Section VI.B.2.a, VI.B.2.b, and VI.B.2.c. The reference to the origin of and authority for these permit conditions listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained

in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, APS believes "A.A.C R18-2-306.A.2" is incorrect and that the correct reference for these requirements is "40 CFR 60.11(d)."

**APS Comment 108** Page 50, Section VI.C.1.a. To keep the permit format consistent throughout the permit, a title to the paragraph should be inserted which says "Opacity." See section V.C.1.a.

APS Comment 109 Page 50, Section VI.C.1.b. This subsection would require that Cholla must continuously monitor for NOx utilizing a CEMs. However, in accordance with 40 CFR 60.45(3), Cholla does not have a requirement to install, operate and maintain a continuous emissions monitoring system for NOx on Unit 4. Per A.A.C. R18-2-306.A.3.b, Cholla must periodically monitor NOx emissions from Unit 4. Cholla has chosen to use the existing NOx CEMs installed for compliance with 40 CFR 75 to periodically monitor NOx emissions for the NOx emission limitation contained in section VI.A.4 of this attachment. Therefore, for technical correctness and permit clarity, this subsection "VI.C.1.b" should be moved to a new subsection "VI.C.3" and the title be changed to read, "Periodic Monitoring for NOx." Accordingly, the existing subsection "VI.C.3" should be renumbered to "VI.C.4."

**APS Comment 110P**age 50, Section VI.C.1.c. Based on comment No. 107, this subsection should be renumbered to V.C.1.b. Also, to keep the permit format consistent throughout the permit, a title to the paragraph should be inserted which says " $SO_2$  and  $O_2$ ." See section V.C.1.a. Also, the word "NOx" should be deleted from this subsection.

**APS Comment 111:**Page 51, Section VI.C.1.c(1) and VI.C.1.c(2). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.13 that this reference should be added.

**APS Comment 112:**Page 51, Section VI.C.1.c(3). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required to be in the permit by A.A.C. R18-2-306.A.3.a, this reference should be added.

**APS Comment 113:**Page 51, Section VI.C.1.c(4). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is required to be in the permit by A.A.C. R18-2-306.A.3.a, this reference should be added.

**APS Comment 114:**Page 51, Section VI.C.1.d(1). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that since this term is contained in 40 CFR 60.13, it should be added as the reference.

**APS Comment 115** Page 51, Section VI.C.1.d(2)(a). The reference to 40 CFR 60 Appendix B, PS1, 5.2 as the origin of and authority for this permit term as required by A.A.C. R18-2-306.A.2.a is incorrect. Section 5.2 of PS1 specifies the Performance Specifications for opacity monitors. This section of PS1 does not specify calibration span values or frequencies. Therefore, this reference should be deleted from the permit. The remaining reference of 40 CFR 60.13(d)(1) is correct.

**APS Comment 116** Page 52, Section VI.C.1.d(2)(e). The title to this section "Data Reduction and Missing Data" is incorrect. This section references 40 CFR 60.13(h) which pertains to data reduction requirements for recorded opacity data. It does not pertain to opacity data that is not recorded, (Missing Data). Therefore, the title should be changed to say, "Data Reduction Procedures."

**APS Comment 117:**Page 52, Section VI.C.1.e(2). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. This term is a requirement of the Acid Rain Program, for which the applicable requirements are contained in a separate attachment to this permit, (Attachment "F"). Therefore, this permit condition should be deleted from Attachment "B".

**APS Comment 118** Page 53, Section VI.C.1.e(4)(a). The reference to origin and authority for this condition includes 40 CFR 60.49a(i), which is a requirement for Subpart Da sources. Cholla Unit 4 is a Subpart D source and therefore, this reference should be deleted from the permit.

**APS Comment 119:**Page 54, Section VI.C.2. This section pertains to Periodic Monitoring required by A.A.C. R18-2-306.A.3.b. Therefore, for technical correctness and clarity, change the title of this section to read: "Periodic Monitoring for Particulate Matter."

APS Comment 120 Page 54, Section VI.C.2.a. This section pertains to periodic monitoring of particulate matter using an opacity CEMs installed and operated for opacity in accordance with 40 CFR 60.13. The particulate matter emission limit is contained in 40 CFR 60.42(a)(1). This emission limit applies to "fossil-fuel-fired steam generators," 40 CFR 60.40(a). The emission limit rate is "0.10 lb/mmBtu derived from fossil fuel," 40 CFR 60.42(a). Therefore, the particulate matter emission limit does not apply during times that fossil fuel is not burned. To clarify this in the permit, APS suggests that the following language be added to the end of the first sentence of this section: "during periods that the unit combusts fuel for the entire three hour period". Also, to clarify when a compliance schedule must be submitted, APS suggests that the word "consecutive" be inserted in the last sentence immediately following the number "72".

**APS Comment 121:**Page 54, Section VI.C.3.a(4). Replace the word "burn" with "batch tested" and the word "tested" with "listed." This change is suggested to make the recordkeeping requirements consistent with the performance testing requirements.

**APS Comment 122P**age 55, Section VI.D.1 and VI.D.2. The reference to A.A.C. R18-2-306.A.3.a is incorrect. While A.A.C. R18-2-306.A.3.a specifies that all emissions monitoring and analysis procedures or test methods required under the applicable requirements be included in a permit, it does not specifically require any monitoring or testing to be performed. APS believes that 40 CFR 60.8(a) provides the authority for the director to require such testing. Therefore, the reference to "A.A.C. R18-2-306.A.3.a" should be replaced with "40 CFR 60.8(a)."

**APS Comment 123** Page 56, Section VIII. The title of this section should be changed to "Coal Preparation Plant". Further, all references in this section to Coal Handling Facility should be changed to Coal Preparation Plant. This change is suggested for technical correctness.

**APS Comment 124P**age 57, Section VIII.B. The reference to the origin of and authority for this permit condition, listed in this section of the draft permit is A.A.C. R18-2-306.A.2.a. The language contained in this rule provision requires that a permit include enforceable emission limitations and standards, including those operational requirements and limitations that ensure compliance. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. Therefore, the inclusion of a condition that stipulates Air Pollution Control Requirements for the Coal Preparation Plant is not authorized. Unless ADEQ determines a reference that clearly requires this permit condition, APS suggests that condition be deleted from the permit.

Furthermore, the coal handling requirements for non-point sources are contained in A.A.C. R18-2-605.B, 606, 607.A, 607.B, and for point sources are contained in A.A.C. R18-2-716. These requirements are included in section XI.A and this section. None of these rules require operation of dust suppression equipment at all times. Instead, they require reasonable precautions when transporting material likely to give rise to airborne dust. Operating dust suppression equipment when material is unlikely to give rise to airborne dust is costly, unreasonable, and not required by regulation.

In addition, EPA has determined that for purposes of Compliance Assurance Monitoring (CAM) spray bars and other dust suppression equipment is not considered pollution control equipment. Including this condition in the permit could lead to such equipment being subject to CAM in the future. For the forgoing reasons, this condition should be deleted from the permit.

**APS Comment 125** Page 57, Section VIII.C. No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. The correct reference for this condition is A.A.C. R18-2-306.A.3.b.

**APS Comment 126** Page 58, Section IX.B. The reference to the origin of and authority for this permit condition listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. APS believes that the correct reference of origin and authority is Installation Permit No. 1244. Therefore, replace the reference to "A.A.C. R18-2-306.A.2" with the reference to "Installation Permit No. 1244."

**APS Comment 127** Page 58, Section IX.C. No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that the correct reference for this condition is "A.A.C. R18-2-306.A.3.b."

**APS Comment 128** Page 58, Section IX.C.2.a. No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. . APS believes that the correct reference of origin and authority is "Installation Permit No. 1244."

**APS Comment 129:**Page 58, Section IX.C.2.b. The reference to the origin of and authority for this condition, listed in the draft permit, is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions,

not specifically required by rules. APS believes that the correct reference of origin and authority is Installation Permit No. 1244. Therefore, replace the reference to "A.A.C. R18-2-306.A.2" with the reference to "Installation Permit No. 1244."

APS Comment 130 Page 59, Section X.B. This condition would require the air pollution control equipment for the Lime Handling and Slaking Systems to be operated 24 hours a day 7 days a week, regardless of whether the sources are operating. Therefore, APS suggests that the following language be inserted immediately following the word maintain: "when the source is operating." Also, the reference to the origin of and authority for this permit condition listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions not specifically required by rules. APS believes that the correct reference of origin and authority is Installation Permit No. 1247. Therefore, replace the reference to "A.A.C. R18-2-306.A.2" with the reference to "Installation Permit No. 1247."

**APS Comment 131:**Page 59, Section X.C. No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that the correct reference for this condition is A.A.C. R18-2-306.A.3.b.

**APS Comment 132** Page 60, Section X.C.2.a. No reference to the origin of and authority for this condition is listed for this permit term, pursuant to A.A.C. R18-2-306.A.2.a. . APS believes that the correct reference of origin and authority is "Installation Permit No. 1247."

**APS Comment 133** Page 60, Section X.C.2.b. The reference to the origin of and authority for this permit condition listed in the draft permit is A.A.C. R18-2-306.A.2. The language contained in this rule provision stipulates what elements a permit shall include. It does not provide authority for ADEQ to include additional permit conditions, not specifically required by rules. APS believes that the correct reference of origin and authority is Installation Permit No. 1247. Therefore, replace the reference to "A.A.C. R18-2-306.A.2" with the reference to "Installation Permit No. 1247."

**APS Comment 134P**age 60, Section XI.A.1.b.(3). The language in the permit is different from the language contained in A.A.C. R18-2-605.A, and it is sufficient to change the meaning of the rule. Specifically, the word "approved" has been added which would require the use of an "approved dust suppressant." A.A.C. R18-2-605.A simply requires the use of a dust suppressant as one of many options to control particulates. Therefore, the word "approved" should be deleted from this permit condition.

**APS Comment 135:**Page 60, Section XI.A.1.b.(4) and XI.A.(5). It appears that two different rules in A.A.C. R18-2-605.B, "Roadways and Streets" and A.A.C. R18-2-606, "Material Handling," were combined to form one permit condition. While both these rules were written to prevent excessive amounts of particulate matter from becoming airborne, it is clear that they were also written to control two different types of non-point sources. (1.) Roadways and streets where material handling is performed and (2.) Areas other than roadways or streets where material handling is performed. A.A.C. R18-2-605.B pertains to transporting of material, while A.A.C. R18-2-606 pertains to transporting or conveying material. Enough differences exist in these two rules so they can not reasonably be combined without changing the meaning or intent of one or both of the rules. Further, A.A.C. R18-

2-606 is already a permit condition in section XI.A.(5). Therefore, the portion of A.A.C. R18-2-606, which is in this section of the permit, should be removed from this section and incorporated into section XI.A.(5). The following language should be used in place of the existing language for These two sections:

- A. Replace the language of Section XI.A.(4) with, "Use reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust."
- B. Replace the language of Section XI.A.(5) with, "Use reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, transporting or conveying material likely to give rise to airborne dust."

The above language is taken from ADEQ's regulations. It should be used word for word in order to avoid confusion.

**APS Comment 136:**Page 60, Section XI.A.1.b.(6). The contents of this section are different than the rule that is referenced. To ensure that the meaning of the rule, for which this condition is based on does not change, the following language, which is taken from the rule, should replace the existing language: "Take reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne, when organic or inorganic material is being stacked, piled, or otherwise stored."

**APS Comment 137** Page 61, Section XI.A.(7). The contents of this section are different than the rule that is referenced. Specifically, the use of the word "and" in place of "or" in the phrase "at all times with a minimum fall of material **and** with the use of spray bars," would mean that a person would have to use both methods simultaneously to prevent excessive amounts of particulate matter from becoming airborne. This contradicts the intent of the rule, which allows a person to use either method alone to prevent excessive amounts of particulate matter from becoming airborne. To ensure that the meaning of the rule for which this condition is based on does not change, the following language, which is taken from the rule, should replace the existing language: "Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material or with the use of spray bars and wetting agents, to prevent excessive amounts of particulate matter from becoming airborne."

**APS Comment 138** Page 61, Section XI.A.(8). The contents of this section are different than the rule that is referenced. To ensure that the meaning of the rule, for which this condition is based on, does not change, the following language should be used: replace the first word "Apply" in the existing language with, "Take reasonable precautions such as,".

**APS Comment 139** Page 61, Section XI.A.(9). No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. ADEQ does not have the authority to require the director's approval before any other method is adopted for any non-point sources at Cholla. Therefore, this requirement should be deleted from the permit.

**APS Comment 140** Page 61, XI.B. No reference to the origin of and authority for this condition is listed for this permit term as required by A.A.C. R18-2-306.A.2.a. APS believes that the correct reference for this condition is A.A.C. R18-2-306.A.3.b.

**APS Comment 141P**age 61, XI.B.1. This condition would require that every time one of the activities listed in section XI.A.1 are performed--no matter how minor, for example, if an operator spent ten minutes cleaning a roadway or site area using a fire hose, or an equipment operator dug a three foot square hole in the earth to access a valve, or a five foot section of dirt road is backfilled due to erosion--someone would need to create and maintain a record of the date of the activity and what control measures were adopted. It would be unreasonable and arbitrary for ADEQ to impose a burden of this magnitude on a source for such trivial emissions, some of which may not even be able to be measured or would never escape the plant boundaries and therefore have no potential to adversely impact the public welfare or health. Therefore, for ADEQ to be reasonable, it should add language to this section to exclude activities of a short duration and which emissions would be trivial. APS suggests that the following sentence be added at the end of this section: "Records of activities of a duration of less than four hours are exempt from this requirement."

**APS Comment 142** Page 61, Section XII.A.1.a.(3). A.A.C. R18-2-726 does not require the Director's approval of other methods as "good modern practices." ADEQ does not have the authority to require the Director's approval before any other method is adopted by a source as "good modern practices." Therefore, this requirement should be deleted from the permit.

## **Attachment "C"**

**APS Comment 143** Page 65, Article 9. Add the reference to "A.A.C. R18-2-903." The provisions of this rule apply to Cholla. In fact, A.A.C. R18-2-903.3 applies only to Cholla.

**APS Comment 144** Page 65, Standards of Performance for New Stationary Sources - 40 CFR 60 Subpart A. The Standards of Performance for New Stationary Sources, Subpart D and Da should be included in this section. Although Cholla is subject to Subparts D and Da under the State rules, it is also subject to these Subparts under the Federal rules. Because Title V permits are intended to include requirements for both State and Federal rules, references to Subparts D and Da should be added to the listing of Federal Standards of Performance for New Stationary Sources.

## Attachment "D"

**APS Comment 145** Page 67, Column 7, Row 1. Replace "865K" with "825K." This is to correct a typographical error.

**APS Comment 146** Page 67, Column 3, Row 4. Add the following to the end of the statement, "as retrofitted with Process Control Equipment internal components"

**APS Comment 147P**age 68, Column 7, Row 1. Replace "85%" with "90%." This is to correct a typographical error. This column is titled "Rated Capacity" and therefore should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "liquid flow rate-5300 lower/16,000 upper per tower; Pr. Drop 18-24" H<sub>2</sub>O."

**APS Comment 148** Page 68, Column 7, Row 5. Replace "94,000" with "94,400." This is to correct a typographical error.

**APS Comment 149** Page 68, Column 7, Row 6. This column is titled "Rated Capacity" and therefore should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "with 10% of electrical bus. sections out of service; Pr. Drop - 0.5" W.C.; gas vel - 4.39 fps;"

**APS Comment 150** Page 69, Column 7, Row 1. This column is titled "Rated Capacity" and therefore, should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "liquid flow rate-10,140 lower loop/25,500 upper loop; Pr. Drop 6" H<sub>2</sub>O."

**APS Comment 151** Page 69, Column 7, Row 2. This column is titled "Rated Capacity" and therefore should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "with 10% of electrical bus. sections out of service; Pr. Drop - 0.5" W.C.; gas vel - 4.97 fps;."

**APS Comment 152P**age 69, Column 7, Row 7. This column is titled "Rated Capacity" and therefore, should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "Air to cloth ratio 5.5:1, Pr. Drop - 4-17" H<sub>2</sub>O."

**APS Comment 153** Page 69, Column 7, Row 8. This column is titled "Rated Capacity" and therefore should only contain information on the capacity of the equipment and should not list operating parameters. Therefore, delete all references to operating parameters as follows, "Liquid flow rate - 38 gpm; Pr. Drop - 2.5" H<sub>2</sub>O."

**APS Comment 154:**Page 70, Coal Wetting System. See redlined version of this page of the permit, enclosure 2, for information not completed by ADEQ.

**APS Comment 155** Page 70, Coal Handling System. Change this heading to read: "Coal Preparation Plant." See redlined version of this page of the permit, enclosure 2, for information not completed by ADEQ.

**APS Comment 156** Page 70, Stack Parameters. Column 7, all rows. A cross reference to Stacks 2 and 3 should be added to each row of this column.

**APS Comment 157**Page 71, Continuous Emissions Monitors. Listing each monitor in this section by manufacturer could restrict a source's capability to accurately monitor emissions, as is required by 40 CFR 75. If a monitor needed to be replaced due to a failure of the primary system, 40 CFR 75 rules allow this to be performed immediately without prior notice to the agency. However, if the monitor is specifically listed in a Title V permit, a source must seek a permit revision prior to making the change. This requirement is not necessary to ensure compliance with any conditions in the permit and therefore, should be deleted. ADEQ has a copy of APS' Acid Rain Monitoring Plan on file. This should provide the agency with sufficient information for the Plant's CEMs.

## **Technical Review and Evaluation Document**

**APS Comment 158**Page 1, Table 1. The megawatt process rates listed in this table represent gross megawatts. For clarification, add the word "Gross" to the headers for columns 3 and 4. Also, the megawatt data in this table are estimated capacities of the respective units. Therefore, insert a footnote at the bottom of the table as follows: "Note: The maximum process rates listed in this table are estimates and therefore, should note be used as operating limits of any kind.

**APS Comment 159** Page 2, Paragraph 1, Line 3. Replace the words "Coal is obtained" with the words "Historically, coal has been obtained" at the beginning of the sentence that starts with the word Coal.

**APS Comment 160** Page 2, Paragraph 1, Line 4. Insert the following sentence immediately following the sentence that ends with the word New Mexico: "Due to unexpected shortfalls in coal output from this historic supplier, APS began and continues purchasing coal from other suppliers as needed." This clarifies the fact that Cholla obtains coal from other suppliers as needed.

**APS Comment 161** Page 2, Paragraph 1, Line 5. Insert the phrase: "includes a Coal Preparation Plant that" in between the words "which" and "directs".

**APS Comment 162** Page 2, Paragraph 2, Line 1. Insert the words: "bituminous or" immediately before the word sub-bituminous.

**APS Comment 163** Page 3, Table 3, Column 3, Row 2. Replace the number 85% with "90%". This is done for technical correctness.

**APS Comment 164** Page 3, Table 3, Column 4, Rows 1, 2, 3, and 4. Remove all references to NOx control equipment. Tangential fired furnaces are not considered "NOx control equipment" nor is close coupled over fired air by the EPA and therefore should not be listed as control equipment.

**APS Comment 165** Page 3, Table 3, Column 2, Row 8. EPA has determined that for purposes of Compliance Assurance Monitoring (CAM) spray bars and other dust suppression equipment is not considered pollution control equipment. Therefore, the sentence in the cell should be replaced with "N/A".

**APS Comment 166** Page 5, Table 5, Column 3 and 4, Row 3. Unit 1 is subject to the NOx standard contained in 40 CFR 76 of 0.45 lb/mmBtu annual average. Using this limit, PTE and allowable emissions for NOx = 2,912 tons/year. Therefore, "2,912" should be entered into these cells.

**APS Comment 167** Page 5, Table 5, Column 3 and 4, Row 8. Unit 2 is subject to the NOx standard contained in 40 CFR 76 of 0.45 lb/mmBtu annual average. Using this limit, PTE and allowable emissions for NOx = 11,707.7 tons/year. Therefore, "11,707.7" should be entered into these cells.

APS Comment 168 Page 5, Table 5, Column 3 and 4, Row 13. Unit 3 is subject to the NOx standard

contained in 40 CFR 76 of 0.45 lb/mmBtu annual average. Using this limit, PTE and allowable emissions for NOx = 11,707.7 tons/year. Therefore, "11,707.7" should be entered into these cells.

**APS Comment 169** Page 5, Table 5, Column 3 and 4, Row 19. Unit 4 is subject to the NOx standard contained in 40 CFR 76 of 0.45 lb/mmBtu annual average. Using this limit, PTE and allowable emissions for NOx = 13,517.1 tons/year. Therefore, "13,517.1" should be entered into these cells.

**APS Comment 170:**Page 7, Table 6, Column 4, Row 8. Based on the reasons stated in APS' response to this NOV, letter to Mr. Michael L. Howeth, P.E. from David R. Simonton, dated November 24, 1997, APS believes that Cholla was in compliance with the provision of a minimum low sulfur coal requirement.

**APS Comment 171** Page 9, Table 9. The common stack of Unit 2/3 is regulated for sulfur dioxide as a separate source and therefore should be listed in this table as such. Therefore, insert the following row in between Unit 3 and Unit 4 as follows:

- A. Column 1, add the words "Unit 2/3".
- B. Column 2, add the date "5/9/72".
- C. Column 3, add the words "Scrubber/Absorber on the Unit 2 portion".
- D. Column 4, add the regulation "A.A.C. R18-2-903.3"
- E. Column 5, add the following: "Installation permit No. 1037 for Units 2 and 3 contained this provision. Later, A.A.C. R18-2-903.3 was written for Cholla Units 2 & 3 to control Sulfur dioxide emissions. Unit 2/3 SO<sub>2</sub> Emission monitoring requirements is subject to 40 CFR Subpart Da requirements, which was established in PSD Permit No. M170843S1-98.

**APS Comment 172** Page 9, Table 9, Unit 3. Due to the changes being made for comment No. 167, remove the following words from column 5: "I.P. No. 1037 for Unit 2/3 was issued on July 6,1973 and permitted Cholla to install a common stack such that both units would comply with SO<sub>2</sub> emissions standards as if they constituted one emission discharge point, which subjected" and insert the words "is subject" immediately following the word Unit 3. Also, Unit 3 SO<sub>2</sub> Emission monitoring requirements is subject to 40 CFR Subpart D requirements, not Subpart Da.

**APS Comment 173** Page 10, Column 3, Row 8. EPA has determined that for purposes of Compliance Assurance Monitoring (CAM) spray bars and other dust suppression equipment is not considered pollution control equipment. Therefore, the words "Dust Suppressants Wetting system". The coal preparation plant at Cholla does utilize mechanical cyclones for particulate removal from the three coal silo exhaust fans installed, one on Unit 1 silos, one on Unit 2 and 3 silos, and one on Unit 4 silos. Therefore, these cyclones should be listed in this cell.

**APS Comment 174** Page 10, Column 3, Row 9. The Cooling Towers for Cholla Units 3 and 4 do not require nor use any means of dust suppression system. Therefore, delete the words "Dust Suppressants" from this cell and insert "N/A".

**APS Comment 175** Page 15, Section VII. Steam Unit 1. Unit 1 is subject to the NOx standard contained in

40 CFR 76. Insert the following language at the end of the sentence for NOx requirements: "except for 40 CFR 76 NOx standards which requires compliance CEMs.

**APS Comment 176P**age 15, Section VII. Add a subsection detailing the requirements of Unit 2/3 (common stack) for sulfur dioxide.

**APS Comment 177** Page 17, Section VII., Steam Unit 3. This subsection should be re-written to accurately reflect applicable requirements as outlined in APS' comments to the draft permit.

**APS Comment 178** Page 18, Section VII, Fly Ash Handling. As outlined by ADEQ in this document and the draft permit, the Fly Ash Handling system is subject to A.A.C. R18-2-702.B.1 for opacity. This rule regulates opacity emissions from Existing Stationary Sources. The only point source that exists within the Fly Ash Handling system is the fly ash silo baghouse vent. This vent has a 40% opacity standard required by A.A.C. R18-2-702.B.1. The remaining portion of the Fly Ash Handling system utilized at Cholla is a closed loop system which means, during conveying (handling), there is no openings in the system which would normally release emissions causing opacity. Opacity could result from occasional malfunctions of the closed loop system leaking equipment) or from emptying a piece of malfunctioning conveying equipment to perform repairs. However, opacity which results from these malfunctions is regulated by the existing non-point source rules contained in A.A.C. R18-2-606 and not A.A.C. R18-2-702.B.1. Further, requiring the visual inspection be performed on the entire system, including these closed loop systems to ensure compliance with the stationary source rule, A.A.C. R18-2-702.B.1 is not appropriate or necessary. Therefore, delete the word "entire" from the second line of the first paragraph and the words "system including all the enclosed transfer points, the exposed transfer points, and the" from the third and fourth lines.

**APS Comment 179:**Page 19, Section VII, Coal Handling. As outlined by ADEQ in this document and the draft permit, the Coal Handling system is subject to A.A.C. R18-2-702.B.1 for opacity and A.A.C. R18-716 for particulate matter. Both of these rules regulate POINT SOURCES of emissions only. Fugitive emissions are regulated by A.A.C. R18-2-604, 605, 606, 607, and 610. Open storage piles are clearly excluded from these rules and therefore should not be included in this section. The 40% opacity standard required by A.A.C. R18-2-702.B.1 or the particulate standard contained in A.A.C. R18-2-716 therefore does not pertain to the coal storage piles. To clarify this, delete the words "the coal storage piles" from the third line of the first paragraph.

APS Comment 180:Page 19, Section VII, Lime Handling and Slaking. As outlined by ADEQ in this document and the draft permit, the Lime Handling and Slaking system is subject to A.A.C. R18-2-702.B.1 for opacity. This rule regulates opacity emissions from Existing Stationary Sources. The only point sources that exist within the Lime Handling and Slaking system is the lime silo baghouse vent and the lime slurry wet scrubber. These vents have a 40% opacity standard required by A.A.C. R18-2-702.B.1. The remaining portion of the Lime Handling and Slaking system utilized at Cholla is a closed loop system which means, during conveying (handling), there is no openings in the system which would normally release emissions causing opacity. Opacity could result from occasional malfunctions of the closed loop system leaking equipment) or from emptying a piece of malfunctioning conveying equipment to perform repairs. However, opacity which results from these malfunctions is regulated by the existing non-point source rules contained in A.A.C. R18-2-606 and not A.A.C. R18-2-702.B.1. Further, requiring the visual inspection be performed on the entire system, including these closed loop systems to ensure

compliance with the stationary source rule, A.A.C. R18-2-702.B.1 is not appropriate or necessary. Therefore, delete the word "entire" from the third line of the first paragraph and the words "all the enclosed transfer points, the exposed transfer points" from the third and fourth lines.

**APS Comment 181P**age 20, Section VII, Non-Point Sources. This subsection should be re-written to accurately reflect the conditions in the draft permit.

**APS Comment 182P**age 22, Section X. Item 53 and 54 both have applicable requirements and permit conditions established in the draft permit and therefore, should not be considered insignificant.

**APS Comment 183** Page 22, Section X, Item 65 and 128. Under the comments section ADEQ has entered the phrase "Under permit term" the meaning of which needs explained before APS can evaluate this reference.